RRIS FORTISSIMA EST NOMEN JEHOVAH

THE HEALTH OF PLYMOUTH IN 1927.

The Health of Plymouth

in 1927.

BY

A. T. NANKIVELL,

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PLYMOUTH

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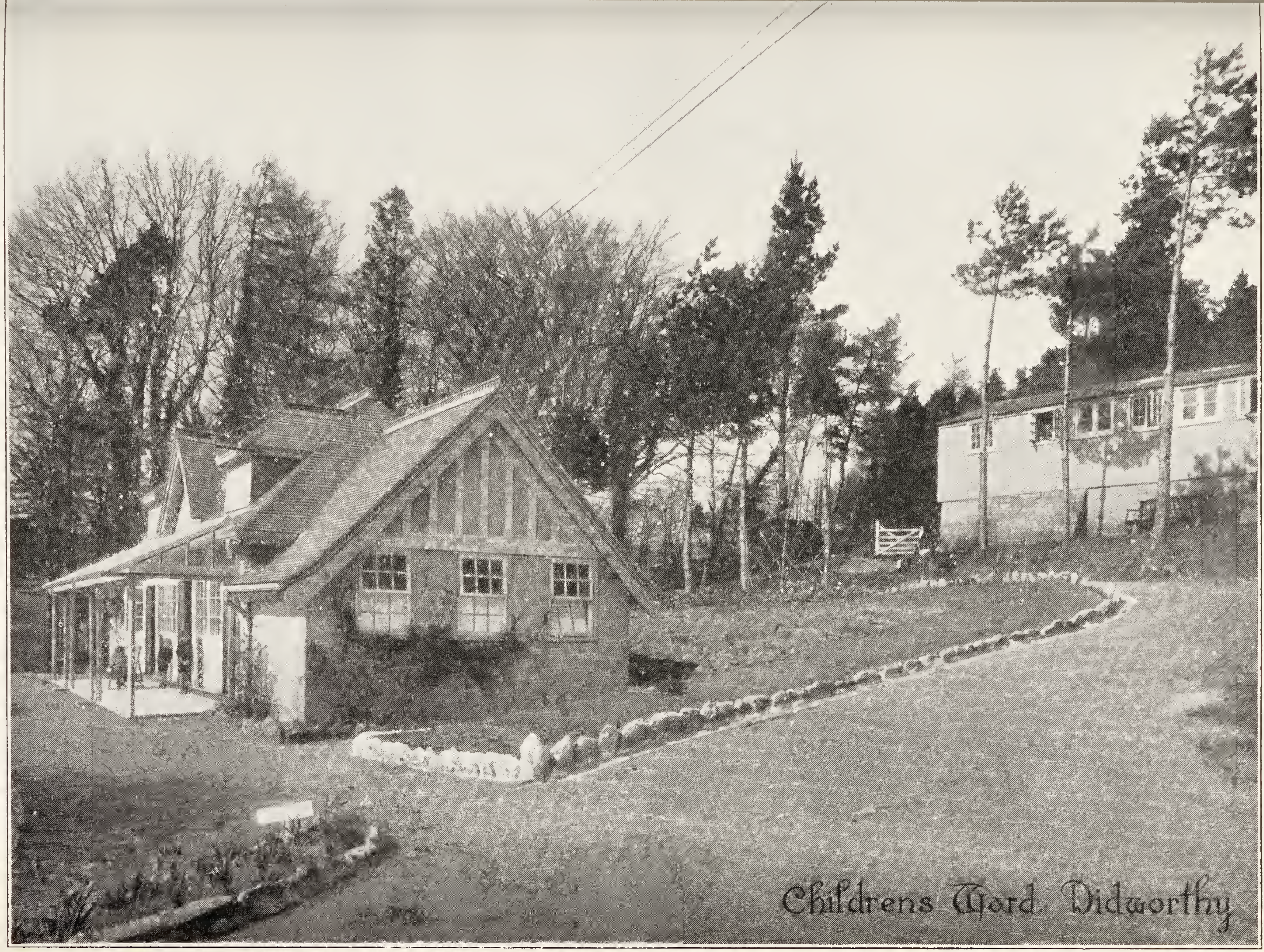
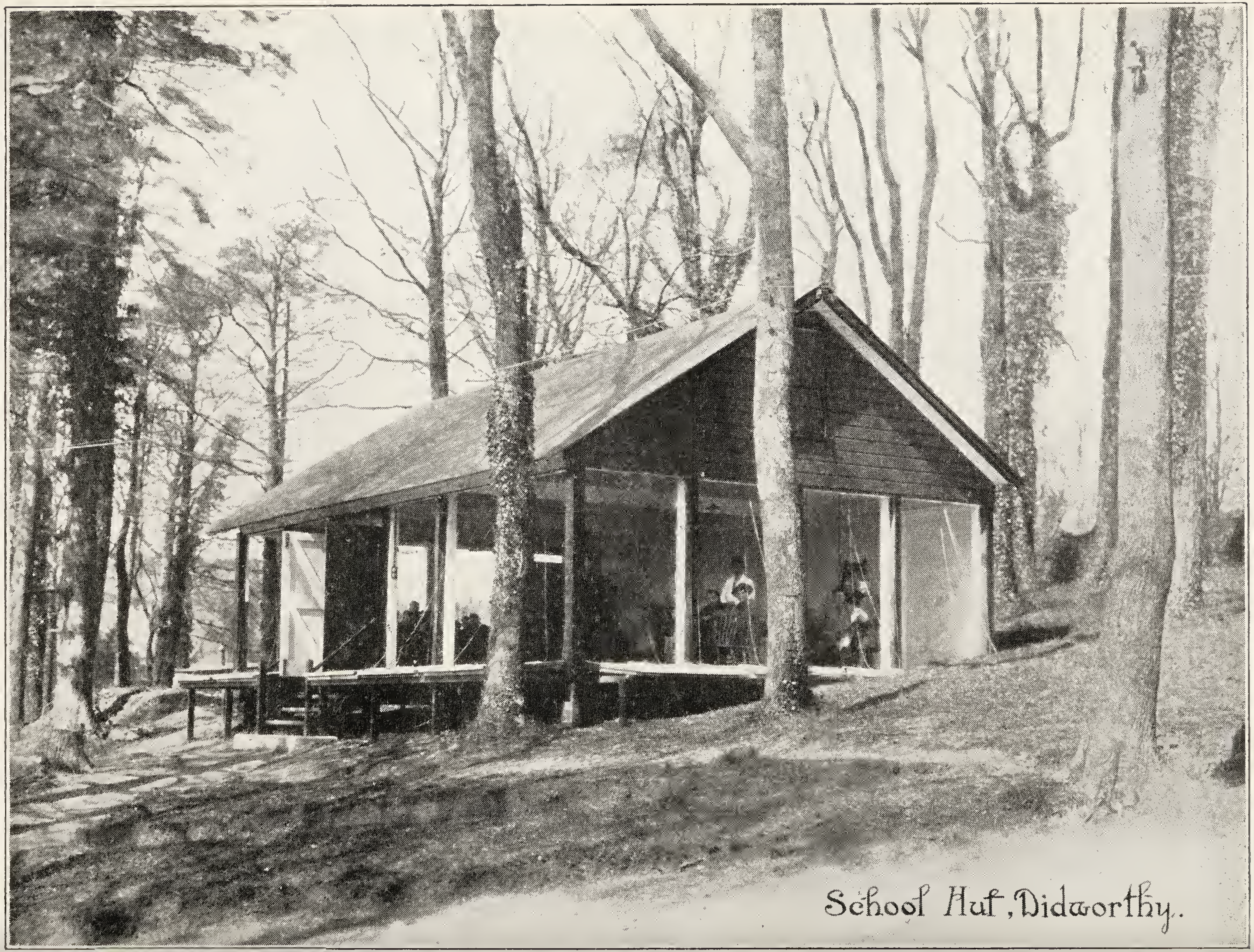


Childrens Ward. Didworthy



School Hut, Didworthy.

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GENERAL VITAL STATISTICS

(*See Tables 1, 2, 3, 4, and 9.*)

YEAR 1927.

Total population (estimated)	211,650
Births—Total belonging to the District after allowing for Inward and Outward transfers	3,502
Deaths—Total belonging to the District after allowing for Inward and Outward transfers	2,547
Birth-rate per 1,000 estimated population	16.5
Death-rate do. do. do.	12.0
Infant Mortality—Deaths under 1 year per 1,000 births	61.0

INTRODUCTORY

The year which is past has seen several improvements in our Public Health Services. The relations between the various departments which I supervise have become more close and no longer can it be said that any sub-department of the Public Health Service suffers from a "splendid isolation." All of them work together for the common good. Every Public Health Department may be likened to a complicated piece of machinery—if one member suffers, all the members suffer with it. But we have had no breakdowns and no hold-ups during the year; and we have done more work, and better work, than formerly.

Administrative improvements have been attained in our Tuberculosis and Port Sanitary Services. We have taken over the public conveniences from the Hoe and Parks Committee. We have increased enormously our health education work. We have converted part of Swilly Hospital into an ideal place for late cases of pulmonary tuberculosis in women. Additional accommodation has been found outside Plymouth for cases of pulmonary and non-pulmonary tuberculosis. Our Maternity and Child Welfare work is increasing still and we have started to give free immunisation against diphtheria to babies and young children—already over 400 have been protected successfully against this disease. Our long-delayed Hospital for Smallpox has been considered, plans have been prepared, and before many months we may hope it will be erected at Lee Mill. Didworthy Sanatorium has been developed most wonderfully. While this Report is still in the Press we have completed the centralisation of our public health and institutional laundry work. Additional effort has been made and much more work has been accomplished in all of our varied undertakings.

During next July—from 16th to 21st—the Royal Sanitary Institute will hold its first Conference in Plymouth. This will be, however, not the first but the 39th Conference of the most important public health society in the world. This Conference will be attended by Mayors, Chairmen of Public Health Committees from all parts of the Kingdom, by delegates from abroad and by members of various Government Departments. Already the main arrangements for this most important Congress have been made ; but I should like to think that the Conference and the coincident Health Exhibition will have the support of the people of Plymouth. The visit of the Royal Sanitary Institute is a great compliment to the town.

Maternity and Child Welfare

In my Report of last year I showed that, on account of the Town Council's wise policy during the last thirteen years, no less than 1,556 lives of little children had been saved. This is a great achievement. It is one of the privileges of citizenship to save the youth of the nation. When we consider what credit is given, most rightly, to the brave man who dives into the sea and saves the life of a child, it is evident that still more honour should be given to the members of the Municipality who save the lives of so many children.

But I have heard it said that by saving these lives we are propagating and encouraging a degenerate race. With this statement I disagree. I have heard it said that these children whom we have spared, would have been better dead. I disagree emphatically with that. Certain children die quickly of congenital disability—they are born tired and they die soon. (Chart B.) Our activities in our Maternity and Child Welfare Centres have not lessened this rapid and inherited capacity for mortality. But we have greatly reduced the deaths from those accidents to babies which never ought to occur. By accidents I mean deaths which should not have happened after the child had taken its own and independent root in life. Given that a baby is born, at full time, of healthy parents, it ought to live, it ought to flourish and it ought to prosper if it is treated well, and has no accident. Unfortunately, however, some of these fine and healthy babies are cut off by accidents—by the ignorance of the mother or the father, by mismanagement, by Whooping Cough, by silly and stupid methods of feeding, by Summer Diarrhœa, by Measles and by gross neglect. These evils can properly be regarded as accidents—more serious indeed than those which assail the elder child under the wheels of the motor vehicle. We are not keeping the unfit alive, if we are saving healthy babies from these accidents.

Sir George Newman, the Chief Medical Officer of the Ministry of Health, in his Memorandum entitled " An Outline of the Practice of Preventive Medicine," says, " It is sometimes urged that the State would be wise to let weakly infants die, thus giving free operation to what is called 'the survival of the fittest.' But if this be wisdom, why restrict such a beneficent principle to infancy? Would it not also be expedient to let the weakly or diseased parent die, and those who may become parents? If disease or defect be permitted by the State to be 'selective' in infancy, why not at all ages? There is, in fact, no end to the application of such a doctrine."

The Plymouth Town Council is trying very hard in Plymouth to prevent these early tragedies. Mothers are taught at our Maternity and Child Welfare Centres how to avoid disease in their unborn child. They are taught and told how to avoid their own and their infant's death in their coming hours of confinement. They are taught how to care for their new little piece of life, how to safeguard their hold on immortality. I do not think that any other public work done by the Corporation appeals so strongly to the instinctive demands and desires of the people. There are some things which we all want. We need food, we demand houses, but more than all we desire the welfare of those whom we hope will grow up to be better and braver men than ourselves. Save the Baby and you save the Nation.

But it is easy enough to think kindly of little children and to be desirous of their health and advancement. We live, however, in difficult times, when money is scarce and must be carefully spent. And we should ask ourselves how should public monies be spent most economically and most advantageously, so that they may most greatly help our Town and England in the future.

Is this money better spent in the upkeep of roads? In street improvements? In the rounding off of corners; in this, that and the other? In anything else which is non-essential? Had we the vision of the Wise, we should search for the demands of the future and not for the present and inessential need. And the future demands a good race of men, strong and happy and healthy and wise—such as any of us would wish our sons and grandsons to be.

This is where our Maternity and Child Welfare work is beginning to prosper. We are nurturing now in Plymouth the seeds of a new race, of healthy and happy children; who, when we are past and gone, will carry on our heritage and thank us for our vision.

The little spent in this work is money which could not be better spent; for we deal here with humanity, and not with stocks and stones.

What extensions of our Maternity and Child Welfare Services are needed in the future ?

Firstly, we need more Health Visitors. Our present small staff is overworked. Each new baby's home should be visited weekly ; and we cannot do that. The home of each child over a year old should be visited once a month until the child goes to school, and we cannot do that either because we have not enough nurses.

Also we need more centres—each costs about £500. We need one at Devonport and another at Laira. If the Swilly area increases we shall soon need another centre in Peverell.

I cannot imagine any more delightful and popular way in which the Town Council can spend its money. Mothers who have little children—and about a thousand a week pass through our centres—are not in the least enthusiastic about this or that or the other which spends the rates ; but they are indeed very enthusiastic about the work which is done and the help which is given at the Maternity and Child Welfare Centres. These and those who staff them, the doctors and the nurses, cost less than a penny rate ; and it is far and away the best and also the cheapest Service which the Corporation gives to the Ratepayer.

Housing.
(*See Table* 18.)

Very much useful work continues to be done by the two Housing Inspectors and by the Sanitary Inspectors in order to remedy defective housing conditions in the Three Towns. During the last three years the owners of insanitary house property have spent upwards of £100,000 in the repair of their insanitary houses, very many of which have now been made reasonably fit for human inhabitation. Year by year we are doing more and more work under the powers given us by the Housing Act of 1925. Section 3 of this Act gives the Town Council power to serve notices upon owners of insanitary house property, directing them to do certain repairs as may be necessary in order to make these houses fit for human inhabitation. If the notice of the Town Council is not obeyed within a reasonable time, the work is done by us in default of the owner, and the cost of this work becomes a first charge upon the property. The vast amount of repair work done, therefore, to insanitary houses has not entailed any cost to the ratepayers.

More than two years ago I scheduled three insanitary areas in Plymouth, and I can only repeat the words in my last Annual

Report: "It appears almost incredible that the short, though necessary, formalities regarding my representation should still be uncompleted, and that matters should have advanced so little towards any definite end." Plans, however, have been prepared and estimates obtained for the reconditioning of the Castle Street and New Street areas. This reconditioning, when it has been accomplished, will greatly improve the amenities of these squalid streets. I should have preferred to have seen the complete reconstruction scheme adopted for this district, but, unfortunately, at the present time, this appears to be impractical, and the reconditioning scheme is therefore better than nothing.

Inspection and Supervision of Food. (*See Tables* 15 *and* 16).

During the year our efforts to preserve the purity of milk and food have been continued and increased, and it may truly be said that the food supply of the people of Plymouth is adequately inspected and properly supervised.

Details of the quantity of unsound meat, fish, fruit, vegetables and other provisions which were condemned during the year are shown in Tables 15 and 16.

Our protection for the town milk supply has also been strengthened, and an Inspector now visits farms within the Borough when the early morning milking takes place, whereas previously we had only been able to visit these farms during the period of the afternoon milking. No less than 448 samples were taken for analysis by the Public Analyst to see if the milk had been adulterated, and of these, only 43 samples were found to be below the legal standard. In addition, 891 samples of milk were submitted to the Borough Pathologist (Dr. E. Wordley), who reported on their cleanliness or otherwise; and 134 samples were examined for the presence or absence of the tubercle bacillus. Among the samples examined, none were found to be infected with tuberculosis. Three years ago there were only two sellers of Certified or Grade "A" milk in the Three Towns; now there are 35 sellers and distributors of this clean milk. Moreover, a large and modern Pasteurising Plant has now been installed at one of the biggest dairies in the town and another firm is selling sterilised milk. I consider, therefore, that the milk supply of the Borough has very much improved and is now much safer than it was. Probably it compares very favourably with the milk supply of any other town in the Kingdom.

Clean milk is better than cleaned milk. Certified and Grade " A " milk can be described as clean milk ; they are obtained from clean cows by cleanly methods, whereas the Pasteurised and sterilised milks may have originated from dirty farms. The public, however, can be assured that these milks have been cleaned satisfactorily before being distributed to the consumer.

A copy of each of the 891 reports from the Pathologist was sent to each of the milk sellers concerned, and each milk seller, therefore, is in a position to know the quality of the milk which he is selling ; and if his milk is found to be below standard, he is given an opportunity to remedy its defect.

Although in Plymouth we have beaten all records for the increase in the sale of " designated milks," I hope that we shall still strive and continue to attain much more better milk (and with it better health) in the Three Towns.

There is a popular idea, which is entirely wrong, that Grade " A " milk is the best which is or can be produced ; and in consequence of this fallacy the public buys Grade " A " milk rather than the infinitely better " Certified milk." Grade " A," indeed, is a second best or even a third winner in the competition for cleanliness and purity.

" Certified milk " is milk produced and bottled on a farm which has been examined and certified by the Ministry of Health. All the cows there are tested with tuberculin by a Veterinary Surgeon. The milk is obtained in the most cleanly circumstances, and when it is delivered to us in bottles it must not contain more than 30,000 microbes in about fifteen drops (1 cubic centimetre of milk), and it must not contain any sewage microbes (the bacillus coli) in one-tenth of fifteen drops. It is the best milk which can be produced.

Next best to it comes Grade " A " Tuberculin Tested milk. This is produced on a farm examined and certified by the Ministry of Health. Practically it is Certified milk, but it is bottled at a dairy or sold in specially locked churns. In other words, it is Certified milk which is not bottled at the farm.

Then comes Grade " A " milk, which is much cleaner than ordinary milk, but it is not so safe and clean as Certified milk. The cows which produce Grade " A " milk are not tested with tuberculin—they are merely examined every three months by a veterinary surgeon. Grade " A " milk may contain 200,000 microbes in a cubic centimetre (fifteen drops of milk) and may have ten times as many sewage microbes as Certified milk is allowed to contain. It is evident, therefore, that Grade " A " milk can be not so safe as, and more dirty than, Certified milk.

The Corporation Hospitals and the Plymouth Maternity and Child Welfare Centres are supplied with Certified milk—and not with Grade " A," nor with the very much inferior ordinary milk.

Waste and Economy.

Our word " economy " is derived from two Greek words which mean the " science of house-keeping." There is the right way in which to manage a house, the clean successful way, in which, as each year passes, money has been well spent and improvements have resulted ; and there is also the wrong way, the wasteful way, in which money has been spent without result. Economy and waste both involve the spending of money—rightly for economy ; but wrongly for waste.

Food. The mass of the people does not understand the economic value of the various sorts of food. Ice-creams, tinned foods, shell-fish and indigestible dishes of all sorts do not make a diet which is scientifically nourishing. They may give the feeling of repletion—the feeling of " bulginess " beloved by little boys ; but their nutritional value is low. They are expensive and not economical foods. The cheapest and most economical foods are not found in tins or packets or cartons ; on the contrary, they are found naturally and near at hand—milk, eggs, fish, flour, butter, cheese, meat and fruit, these are the natural and therefore the most economical foods for man.

Most of the well-trained or well-educated people keep what is known as a " stock pot." Into this is put everything nourishing which cannot be eaten—bones, for example. The " stock pot " is, and should be, the basis of the family's cooking. From it soups and sauces are made, gravies and jellies are prepared from it, and, owing to its presence, there is always something palatable and wholesome for eating in the house. Last year about 800 tons of bones in Plymouth were thrown away into the dust-bin—good bones which should have found their way, not into the dust-bin, but into the " stock pot." This was waste and not economy.

Bread. And year by year more than 400 tons of bread are thrown away by the Plymouth people—thrown into the dust-bin and sent to the tips or destructor. Nearly a million pounds of bread are wasted every year in our Town. Is this waste or economy? There are so many ways in which stale and partly eaten bread can be used, most profitably and most daintily for food. The education of our housewives would appear to be sadly deficient, in spite of our so-called " educational " classes in cooking. Perhaps, however, the next generation may be less wasteful cooks—certainly they could hardly be worse.

Fuel. The waste of fuel in this and other towns is surprising. Yearly the Plymouth people throw away into their dust-bins nearly 14,000 tons of combustible material. Fuel is not cheap, and yet a vast amount is wasted. Almost all the material burnt in the town's refuse destructor could be burnt in the kitchen range; yet the inhabitants wilfully send away their fuel to be burnt by someone else. The town has the expense of carting this material and the people lose because they have given away their valuable fuel. Almost anything which is put into the dust-bin, except tins and broken crockery, is combustible and should be burnt at home.

Money. Of the waste of money it is perhaps hardly my province to speak—except to say this, that " Public Health is purchasable," and it is economy and not waste to purchase the greatest asset which a man or woman can possess.

Time. There is a saying that " time is money," and yet we waste time almost without a thought. " I wasted time and now doth time waste me," says Shakespeare, and we see the results inevitably and unfortunately to-day. But I do not wish to stress this aspect of Preventive Medicine unduly. I cannot pass from the subject, however, without protesting against the waste of time spent by our little children in the streets when they should be at home and in bed and asleep. Time cannot better be spent by little children than in sleep and rest, and it is a scandal to see our children under six or ten or twelve years of age about in the streets late in the evening. The good health of the next generation is not founded in the weariness of youth, and it is waste and not economy for young lives to be worn out after dark in the streets and public places of our town.

Again, it is a waste of time for a sedentary worker not to take some exercise day by day. Many live in shops and offices, out of the air and sun, and go home after work in the evening to their supper and to bed. They take little or no exercise, and their health becomes gradually undermined. They say they have no time for exercise—they take a tram or bus instead of walking for half an hour. That is waste and not economy. Half an hour's brisk walk —even once a day—would help to keep all of us well and happy.

Health and Life. "Man is a noble animal," says old Sir Thomas Browne; but with the march of civilisation man's departure from the animal's life and freedom has become more and more rapid. He no longer lives in the open air, in the woods and caves, in the wind on the heath; he languishes to-day in tenements, in insanitary and overcrowded areas, in slums, in offices and shops—as far removed from natural life as he can be. Yet, in spite of his adverse surroundings, the length of man's life is increasing. The expectation of life at birth is to-day ten years more than it was half a century ago. In other words, a baby born to-day will, on the average, live ten years longer than if it had been born in 1878. In spite of our adverse conditions we are more healthy and are living longer than our ancestors, and this extension of the life of men and women in this country can be attributed only to our better hygiene and sanitary conditions. The great Public Health Act of 1875 and the succeeding enactments of Preventive Medicine have added to the length of our lives. Preventive Medicine has resulted in economy and not in waste, and our hope for the future may well be that of the prophet Isaiah—"there shall be no more an infant of days, for the child shall die an hundred years old."

But we must work, as those before us have worked, if we wish our grandchildren to attain this ideal.

Health Education.

Living matter, whether it be animal life or plant life, must rid itself of its waste products if it wishes to be healthy. The ill-ventilated, overcrowded greenhouse, and even the over-planted garden, means death to their flowers and fruits. The overcrowded house, the Black Hole of Calcutta, the conservation of the waste products of human life, brings death to these producers if they are forced to live among their waste and excrement. It would seem that this were one of Nature's Laws—not to be broken even by the caged bird, the pet rabbit or the tame white mouse: these, as ourselves, must be kept clean if they are to live: they must be kept free of their own waste products.

In the bad old days this country was cleaned up by legislation. No longer is domestic refuse and offal allowed in the streets, no more is the water filled with sewage. The domestic cesspool, the accumulation of filth in, around and underneath the house has been prevented by the law of the land. Our towns and cities have been made clean by the law.

But this compulsory cleaning and removal of our waste products is no longer required, except in special and isolated instances. To-day, it is an exception for a bad and dangerous nuisance to be discovered, for a foul and unhealthy accumulation to be found. And to-day I believe that there is very little improvement in the general health which can be accomplished by fresh legislation. This country and every town in this country has set an example to the world, showing the results of wise laws and enactments of Parliament. But the State cannot help us any longer. The betterment of the health of the people now lies with the people themselves.

In modern conditions, the ratepayer and taxpayer, he and his wife and children, can be healthy if they so desire. The evil obstacles of half a century ago have been cleared away by the State and the man of to-day has a free and clean way along his avenue of health. His progress and his achievement depend now upon his own efforts.

All which the Health Services can do is to teach him, to make him interested and enthusiastic, to encourage him upon his journey.

And this help is what we call Health Education.

We have done much in Plymouth during the last two years in the encouragement of health ideals. We have, for example, our monthly health magazine distributed about the town at the rate, at present, of ten thousand copies a month. It pays for itself—and costs the ratepayers nothing ; indeed, it brings in a small profit. The circulation of this Report may perhaps be considered excellent health propaganda. We exhibit lantern slides throughout the year at various theatres, music halls and cinema houses ; we advertise in the trams and in the stations ; we advertise, whenever we can find an opportunity, at exhibitions and in the Press. The local newspapers have always been most kind in helping forward the ideals of health, and I am very grateful for the help which they have given to our efforts throughout the year. We advertise also by the visits of our health visitors and nurses—they bring, very often, health, encouragement and example into the homes of the people ; and we advertise also by many and varied leaflets and posters. There cannot be many people in Plymouth to-day who, if they care to look and see, are ignorant of the primary and essential methods by which health can be attained and kept. Nothing matters more to anyone than the health of himself, of his wife and of his children.

Each year in England, on the average, 540,000 insured persons do not work throughout the year because of sickness, very much of which is scientifically preventable. Actually there is no less than 28¼ million weeks of work lost by insured persons alone who have drawn sickness or disablement benefit. This costs the State and Provident Societies over sixteen million pounds.

Even if a quarter or a tenth or even a hundredth of this illness had been saved, consider what a financial gain would have resulted to the individual, to the town and to the country. It is in order to prevent this waste of health and substance that we have organised our health propaganda work in Plymouth.

Good Health Propaganda is synonymous with good advertising ; but there is this difference—good health propaganda points the way to a definite need, but good advertising creates a need for something which might not be absolutely essential.

All the people need good health, but all the people who buy patent medicines do not need them. So the principles of good advertising apply with equal force to good health propaganda.

Everybody needs the sun. To supply that need the wise Health Propagandist creates the desire for the sun, and he does so by applying the principles of good advertising, which are founded on a sound knowledge of psychology. We repress unpleasant emotions and remember those things which give us pleasure. Therefore, all good advertising summarises a need and raises a pleasurable emotion. There is also the fact that eighty per cent of the people remember a picture better than they remember words. So, first we must make a slogan—" Seek the Sun "—and then illustrate it with a pleasant picture of somebody seeking the sun. In this way have been evolved the 456 slides which in 1927 were exhibited 16,470 times in Plymouth cinemas and theatres.

The Health Propaganda Films available throughout the world are not of high standard. We collected twenty-four of the best of them for a week's exhibition at a local Cinema in February last. The subjects dealt with included Venereal Diseases, Maternity and Child Welfare, Tuberculosis, Rats, Milk and Influenza. Over 4,000 persons attended thirteen exhibitions of these films and a packet of a dozen leaflets was given to each one. The creation of high-class Health Films is a work which should be undertaken by some central body. In my opinion, they should be short (500 feet in length, to last about ten minutes) and entertaining. Most of those now available are poorly produced and too scientific—they need to be " humanised " and they must entertain as well as instruct.

The same principles apply to Health Literature. It is very hard to escape " the official mind " and to be unorthodox. On the other hand, Health Literature risks losing its authoritative note when it undertakes entertainment together with instruction. It is not practicable to compete with the cheaper weekly journals. A balance has to be preserved. The problem is how best to gain the interest of the uneducated and thoughtless. The " mixture " of entertaining instruction must be judicious, carefully planned, and capable of appeal to every person. We are in the pioneering stage with our Magazine " Better Health." Our short experience has proved that in its present form it has a very small sale to those who most need the instruction it contains, and that it is valued so much more if it is paid for. We are gradually feeling our way towards that form of expression, which will give more abundant life to the people.

At the invitation of the local Grocers' Association we erected a stall at their Exhibition in the Drill Hall. One Department of the stall was devoted to Maternity and Child Welfare work—there was an exhibition of model garments, clean food, etc.—and much literature was sold or given away free—the remaining part of the stall was devoted to propaganda work. All our cinematograph slides were on show, with very fine lighting effects, some of the best posters were displayed, together with the Exhibition Slogan—" Eat Clean Food from Clean Shops." Specimen copies of " Better Health " were given away and many thousands of leaflets and Health Hints. An exhibition of Health Propaganda slides and literature was also given at the Sanitary Inspectors' Congress which was held in Plymouth in July last.

A Runsyne Machine was fixed at the Tram Terminus, Theatre Royal. This machine bears an illuminated running message and has a capacity of 240 letters. The following is an example of one of the talks :—

> "Never neglect the beginnings of disease. Early disease and slight illness is easily cured, so obtain skilled advice before it is too late. A sock with only a small hole in it can be mended and so can slightly damaged health be repaired."

Other messages by this medium included the following subjects :—Diphtheria Immunisation, Coughing, Sneezing and Spitting, Clean Milk, Bad Teeth, and other subjects of Public Health importance.

Day by day I receive letters and postcards from ratepayers and others who have been moved by our Propaganda to write to me on some health subject. Public Health propaganda really teaches the people—they know at last what to do individually to avoid Disease, and they know that there is a living public health department ready and willing to help them. If I were to be given my choice between having an additional Sanitary Inspector or an additional sum of £300 per annum for health education, I should unhesitatingly choose the latter; for sickness, disability and subsequent pauperism is not an asset to any town. So much of this chronic invalidism can be prevented if the people have knowledge.

In the following pages will be found Reports written by medical members of my Staff and by myself upon various aspects of public health work in Plymouth and in our Institutions. From these it is possible to appreciate the nature of some of our wide-spread organisation. After these Appendices I have reproduced some Charts, which show in a graphic manner many matters of health importance. This Report is completed by a number of Tables, from which the reader may be informed of the intimate details of the work which has been done, during the year, in the interests of the people of Plymouth.

A. T. Nankivell.

March, 1928.

APPENDIX I

Additional Information Required by The Ministry of Health.

Statistics and Social Conditions. Area in acres, 5,711 ; population, 1921, 210,036 ; population, 1927, 211,650 ; number of inhabited houses, 29,014 ; number of families, 1921, 53,288 ; rateable value, 1927, £1,179,202 ; sum represented by a penny rate, £4,779.

Births (Legitimate)—1,611 females, 1,732 males. Total 3,343.
Births (Illegitimate)—70 females, 89 males. Total, 159.
Birth-rate, 16.5.
Deaths. Total number of deaths, 2,547. *Death-rate,* 12.0.

Number of women dying in, or in consequence of, childbirth, from sepsis, 11 ; from other causes, 16.

Deaths of infants under one year of age—Legitimate, 193 ; illegitimate, 21. Total, 214.

Deaths from measles (all ages), 11 ; whooping cough (all ages), 13 ; diarrhœa (under two years of age), 16.

General provision of Health Services :

(*a*) Fever—Mount Gold Isolation Hospital, 80 beds ; Swilly Isolation Hospital, 66 beds ; *Flamingo,* 22 beds for Smallpox.

(*b*) Tuberculosis and Maternity. See other sections of this report.

(*c*) Ambulance facilities. The Corporation has three ambulances for infectious cases. Other non-infectious and accident cases are dealt with by the St. John Ambulance Association.

(*d*) Clinics and Treatment Centres. Six Maternity and Child Welfare Centres, one Day Nursery (voluntary), three School Clinics, two Tuberculosis Dispensaries and one Treatment Centre for Venereal Diseases.

(*e*) Public Health Officers. See list at beginning of Report. In addition there are 10 District Sanitary Inspectors, 2 General Inspectors, 1 Rat Inspector, 1 Fish Inspector, 2 Housing Inspectors, 12 Health Visitors, and 10 School Nurses.

(*f*) Professional Nursing in the Home. Home nursing is done for the Corporation by Nurses from the Alexandra Nursing Home and the Three Towns Nursing Association.

(*g*) Midwives. A fee of 25*s*. is paid to midwives for attendance on necessitous cases when the patient is not entitled to Maternity Benefit under the National Health Insurance Act.

Number of midwives practising in Plymouth, 94. Of this number 11 left during 1927 after completing period of training in the Three Towns Nursing Association.

(*h*) Chemical Work. Samples are sent to the Borough Analyst, T. Tickle, Esq., Exeter.

Sanitary Circumstances of the Area. I have nothing to add to my remarks of last year. Details of inspections are given in Table 13.

Housing. Statistics for the year are given in Table 18.

Inspection and Supervision of Food. See body of Report and Tables 15 and 16.

Prevalence of, and control over, Infectious Disease. See Appendix III, and Tables 4, 7, and 13.

Registration of Maternity Homes.

Number registered prior to 1927	13
1. Application for re-registration	1
2. Number re-registered	1
3. Number of orders made refusing or cancelling registration	Nil
4. Number of appeals against such orders	Nil
6. Number of applications for exemption from registration	Nil

APPENDIX II

Maternity and Child Welfare.

By Ann Clark, M.D., D.P.H.

A great improvement has been effected in the premises used for Welfare Centres this year by the erection of a Hut in Beaumont Park which supplies the Barbican and Prince Rock areas and replaces the very unsatisfactory arrangements at Embankment Road and Lambhay Hill. This has resulted in increased attendances, and it has already been found difficult to accommodate the numbers that attend, although five clinics per week are held there.

A similar centre is urgently required for the Morice Town area since the Alexandra Hut is no longer available and the temporary premises now in use are very unsuitable.

Ante-natal work is making steady progress. The ante-natal clinics are being increasingly used by midwives in the Town to such an extent that the local Midwives' Association has been supplied with printed cards for ante-natal records, and these their patients bring to the clinics to be filled in by the Doctor. Information of any abnormality that is found in any patient is sent to the midwife in charge of the case, instructions are given as to any treatment that may be required during pregnancy and the midwife is advised whether medical assistance is necessary.

Attendances at the Ante-natal clinics during the year have been as follows :—

	1st Attendances.	*Total Attendances*
Town Hall	280	674
Beaumont Hut (10 months) ..	96	317
Wolseley Hall	41	126
St. Aubyn Street	83	205
Alexandra Hut (5 months) ..	31	56
Three Towns Nursing Home ..	450	650
Total ..	981	2028

In a series of 400 cases the following abnormalities were dealt with :—

Contracted pelvis	19
Digestive troubles—	
(*a*) Vomiting	41
(*b*) Flatulence	25
(*c*) Constipation	80
Varicose veins	39
Hernia	5
Prolapse	10
Pulmonary disease—	
(*a*) Bronchitis	18
(*b*) Tuberculosis	7
(*c*) Asthma	5
(*d*) Pleurisy	1
Graves disease	1
Appendicitis	2
Malpresentation	6
Albuminuria	38
Œdema	17
Leucorrhœa	90
Venereal disease—	
(*a*) Gonorrhœa	9
(*b*) Syphilis	8
Hæmorrhage	17
Cardiac disease	10
Referred for Dental Treatment	67
Fibroids	3
Scabies	2
Fits	4
Ovarian cyst	1
Number of Primiparæ examined	90

Dental Treatment. This is supplied in necessitous cases for children under school age and for nursing and expectant mothers. There is a deep-rooted prejudice against dental extractions during pregnancy which will require much time and patience to be eradicated. It is found that many mothers make appointments with the dentist which they fail to keep.

Number of extractions with general anæsthetic :—Women (free), 20 ; patient paid 25% of cost, 5 ; do. 50% do., 3 ; do. 100% do., 3. (*b*) Children (free), 23 ; 50% of cost repaid by parents, 10 ; 100% do., 8. Number of dentures provided, 25% paid by patient, 14 ; 50% do., 1. Repairs to dentures, part cost paid by patients, 2. Total, 89.

Convalescent Homes. In December, 1927, the Ministry of Health approved the provision of convalescent home treatment for expectant and nursing mothers. This will fill a long-felt want since it is not unusual for a mother to suffer months of semi-invalidism because she has never had the chance to rest and make a complete recovery after any severe illness. Since the welfare of the children depends primarily on the care which they receive from their mothers, it follows that the best possible investment is to ensure the health and strength of the mother.

Diphtheria Immunisation. A special clinic was started in January for the prevention of diphtheria. Progress during the first few months was slow but the parents are gradually becoming accustomed to the idea and increasing numbers attend each week. The routine procedure is as follows : All children between the age of six months and five years are advised to undergo treatment. It has been estimated that 57 per cent of deaths from diphtheria occur in children under five years of age, so it is essential that immunisation should be carried out as early as possible. The child receives three 1 c.c. doses of toxin-antitoxin at intervals of a week and is Schick-tested after three or four months. In some cases it is necessary to give a second course of injections before the child becomes Schick negative.

Schick testing is not done before the injections are given unless the parents specially wish it, as according to Park and Zingher practically all children under five years of age are Schick positive.

Toxin-antitoxin mixture was used for the first eight months and then toxoid-antitoxin mixture was substituted (i.e. Toxin which has been treated with formalin in order to reduce the Toxicity). The use of toxoid-antitoxin eliminates the risk of fatality incurred by using improperly made toxin-antitoxin.

Reaction is negligible in children under five years of age. In five cases there was a slight local reaction, and in two cases the child vomited on the day of injection. Immunity is not acquired for some months after the injections and the child may therefore contract diphtheria in the interval. One case only has been notified in children who have received three injections, and this occurred two weeks after the last injection.

Number of cases that have received three injections ..	330
Number of cases that have not completed the course of three injections	16
Number Schick-tested 3–4 months after last injection ..	75
Number found Schick negative	75

Ultra-Violet Light Clinic.

During 1927 there have been 130 new cases and 2426 attendances. The conditions treated were :—

Rickets. (*a*) Advanced cases with marked deformity, 43. Of these cases 31 attended the orthopædic department at the South Devon & East Cornwall Hospital, and 7 were admitted to the Orthopædic Hospital at Ivybridge.

(*b*) Early Rickets with no deformity or with very slight deformity, 61.

(*c*) Prophylactic treatment in cases specially predisposed to Rickets, 5.

The results in all these cases have been very satisfactory. Rickets has not developed in any case which has received treatment. The early cases have been entirely cured in from two to four months, and no further deformity has resulted after treatment has ceased. In old standing cases it is generally found necessary to combine orthopædic treatment with light therapy ; but in some cases, where the parents objected to this, marked improvement has resulted from light treatment alone. It is found that a course of treatment lasting from three to four months gives the best results, i.e. 24–30 exposures. If treatment is persisted in for a longer time the patient, in many cases, becomes over-stimulated, as evidenced by irritability, loss of appetite and sleeplessness, and this condition immediately improves when the treatment is stopped. It is therefore preferable to give a " repeat course " after an interval of one or two months if this is considered necessary. The routine procedure consists of two exposures per week, increasing from two minutes to a maximum of ten minutes, only half the body being exposed each time, so that the whole body is completely exposed once a week. These short exposures at long intervals do not give rise to pigmentation for a considerable time.

Of Malnutrition. Sixteen cases were treated. The results in these cases were disappointing. In five cases there was no increase in weight after four to six weeks' treatment. In seven cases there was a gain of 2 to 4 ozs. per week, and in four cases only was there a marked improvement. Since so many different factors are involved in the production of these cases it is not surprising that one line of treatment fails to benefit more than a small section.

Skin Diseases. Nine cases were tested by ultra-violet light rays.

(*a*) Impetigo of face and scalp. One, cured in three exposures.

(*b*) Flexural eczema, long standing. Five cases.

One cured in five months.

Two cured in three months.

Three cases still under treatment and improving.

(*c*) Seborrhœic dermatitis of face and scalp. Three cases.

One cured in four months.

Two cases still improving after treatment.

The results in these cases have been very encouraging, though it must be remembered that attendance at the Light Clinic involves continual supervision with attention to diet, protection from injury and the application of dressings when necessary, this probably has an effect on the case at least equal to that produced by the light therapy.

Chronic Bronchitis. Three cases. The chest condition improved while the children were undergoing treatment, but recurred at a later date in two cases.

Tuberculous Glands of Neck. Two cases. These are still undergoing treatment and there is only slight improvement.

Secondary Anæmia. One case. Showed rapid improvement. Hæmoglobin rose from 55 per cent to 65 per cent in six weeks.

Infantile Paralysis. One case. No apparent improvement.

PUERPERAL FEVER.

The Puerperal Fever and Puerperal Pyrexia Regulations which came into force in October, 1926, prescribed new forms for the notification of " puerperal fever " and in addition required the notification of cases of " puerperal pyrexia," thus placing an obligation upon Medical Practitioners to notify all cases of pyrexia during the puerperium irrespective of the cause to which the rise of temperature may be attributed. The Ministry of Health, in a circular issued to Local Sanitary Authorities, pointed out that if this notification was to have practical value it should be supplemented by the provision of facilities for assistance in diagnosis and for the treatment of patients. Since these regulations came into force 94 cases of puerperal sepsis and pyrexia have been notified, and assistance has been provided by the Public Health Department as follows :—

Number of cases removed to hospital	36
Consultations in connection with diagnosis	12
Bacteriological examinations in suspected cases ..	4
Special nurses provided	9

Medical practitioners in the Town have co-operated wholeheartedly with the Public Health staff in their endeavours to ascertain the cause of these pyrexias. In almost every case information has been supplied directly by the doctor notifying the condition, and no effort has been spared to come to some reliable conclusion.

These cases may conveniently be divided into three classes :—

Severe cases where it was found necessary to remove the patient to a hospital or nursing home.

Mild cases where the temperature was raised for some days ; but the patient could be nursed at home.

Cases of rise of temperature following abortion.

Severe Cases. There were 41 in this class, with 11 deaths.

Date of onset of Disease. This was generally early. Twelve cases started on the third day following delivery, and twenty-five had developed by the fourth day.

Clinical Course of Labour. Instrumental delivery was performed in twelve cases. Ruptured perinæum and lacerations occurred in seventeen cases. Bacteriological examinations were carried out in most of the cases which were removed to hospital, and retained placenta was found in sixteen of these cases. A summary of these severe cases shows that :—

(*a*) Twenty-six cases were predisposed to infection owing to the presence of retained placenta or lacerations.

(*b*) Two cases gave a history of adherent placenta, but no exploration of the uterus was made.

(*c*) Four cases gave a history of difficult labour, with numerous examinations.

(*d*) Two cases were nursed by untrained women with no knowledge of asepsis.

(*e*) One case may have become infected by a midwife who had a septic finger, but there was also an old complete ruptured perinæum, and as no evidence is available as to the bacteriology of the case no definite opinion can be given.

(*f*) In one case the condition was attributed to uncleanliness in the home surroundings.

(*g*) Of the remaining five cases insufficient evidence was collected to find out the primary course of infection. These cases include phlebitis, one ; secondary post-partum hæmorrhage, one ; history of vaginal discharge and albuminuria, one ; post-partum eclampsia, one ; history of venereal disease, one.

Vaginal Discharge. There were very few cases in which it was found possible to obtain reliable information as to the presence of vaginal discharge during pregnancy. In the Routine Examinations at the ante-natal clinics it was found that 22.5 per cent of women had some discharge, so it may be assumed that a certain number of these cases also were infected in this way. In no case, however, was it possible to demonstrate that auto-infection had definitely taken place from a pre-existing vaginal discharge.

Home Conditions. Poor surroundings do not seem to have had any marked influence on the production of pyrexia. In one case only the house condition was definitely reported to be unclean, and in two cases the patient was nursed by untrained women with elementary ideas of asepsis. On the other hand, twenty-three cases occurred in institutions where the conditions would certainly be more favourable than the usual home surroundings.

Transmission of Infection. In only one case was there any suspicion of infection being conveyed from one case to another. Three cases occurred simultaneously in one Nursing Home, one of which died in the Home. Acting on the advice of the Medical Officer of Health this Home was closed and a thorough cleansing and disinfection was carried out. Another case occurred as soon as the Home was re-opened. The whole of the staff was then examined by the Medical Officer of Health and it was found that one nurse had discharging ears and a septic finger and was probably the original source of infection. At another time two cases occurred in a Nursing Home, but it was definitely shown that the infection in the two patients was attributable to different micro-organisms. In every case that has been notified the midwife in attendance has undergone thorough disinfection, and the rooms and bedding of the patient have also been disinfected.

OTHER AND MILD CASES.

These call for no special comment.

APPENDIX III

The Control of Infectious Disease in the Borough.

By E. J. HYNES, F.R.C.S. (Ed.), D.P.H. (Lond.).

Scarlet Fever. During the year 325 notifications of Scarlet Fever were received (this number included one Naval and one Military case) ; of these 273 (84%) were treated in our Isolation Hospitals. Seven cases were found to be suffering from diseases other than Scarlet Fever and returned home after a brief stay in hospital.

Fourteen return cases were notified (i.e. second cases of Scarlet Fever occurring within 28 days of the return from hospital of a Scarlet Fever patient). All these cases were investigated, the house visited and the returned patient and other members of the family examined. In only five cases was any evidence of infectivity of the returned patient discovered ; one of these had been removed from Hospital by his parents against the advice of the Medical Officer in charge. He infected another member of the family. This leaves only four actual return cases, less than 1.5 per cent, a very satisfactory figure and much below the usual fever hospital rate. This is possibly due to the efficiency of serum treatment. In spite of all precautions a few return cases are unavoidable, as children, free from all evidence of infectivity when they leave hospital, occasionally catch cold on their return home and develop an infectious nose or ear discharge.

The incidence of Scarlet Fever in Plymouth has been rapidly diminishing since last year. In 1926 we received 606 notifications ; in 1927, 325, of which 241 were in the first half of the year. The disease has been generally of a mild type. All cases admitted during the acute stage of the disease (i.e. with rash present) have been treated with Scarlatina anti-toxic serum. Complications have been few and mild ; this is probably largely due to the serum administration.

The average stay in Hospital has been 29.1 days, as against 29 days last year. The average stay in hospital of the patients treated without serum last year was 43 days.

There were three deaths in hospital indirectly attributable to Scarlet Fever. Case 1 was admitted to hospital with severe nephritis, having had Scarlet Fever three weeks before admission. No serum was given to this patient. He died from nephritis. Case 2 suffered from concurrent Scarlet Fever, Measles and Pneumonia and died of nephritis. Case 3 suffered from concurrent Scarlet Fever, Chicken-pox and Pneumonia and died from Pneumonia.

Diphtheria. During the year 372 cases were notified (this number includes one naval and one military case), against 283 last year. This higher number is largely due to the increasing use of bacteriological methods of diagnosis. Many cases have been admitted to hospital with no clinical evidence of disease, but with bacteriological evidence of the presence of Diphtheria bacilli in the throat or nose. Ninety-five cases, after observation in hospital and repeated bacteriological tests, proved to be suffering from diseases other than Diphtheria (mainly tonsillitis). These cases were sent home as soon as the presence of Diphtheria had been disproved.

Many of the cases have been of a very severe type. There were twenty deaths in hospital—seven died within twenty-four hours, fifteen within a week of admission. It is satisfactory to note that cases have been sent to hospital at an earlier stage of the disease than they were last year, and that more advantage has been taken of the facilities provided by our Pathological laboratory for bacteriological diagnosis. Cultures were made and examined at the Pathological laboratory from 6075 throat and nose swabs during the year, in comparison to 4525 last year.

Prevention of Diphtheria. A small outbreak of Diphtheria occurred in one of the general hospitals in the town, apparently due to a carrier among the nurses. All members of the nursing staff were Schick tested ; fourteen who proved susceptible to Diphtheria were immunised, throat swabs were examined, one "carrier" was discovered and removed to Mount Gold Hospital. There was no further case of Diphtheria in the institution after these measures had been taken.

Schools. When several cases of Diphtheria have occurred in a school, the school has been visited, the children examined and swabs taken and any carriers found have been isolated and treated in hospital. These measures have prevented the spread of the disease in every case.

Free Schick testing and immunisation has been offered and carried out at the Maternity and Child Welfare Centre. Children were immunised there between May and December as follows :—

No. of cases that received three injections	330
No. of cases that have not completed course of three injections	16
No. Schick-tested, 3–4 months after last injection	75
No. found Schick Negative	75

As far as we know, up to the present time, no immunised child has contracted Diphtheria.

Enteric Fever. Ten cases were notified, eight were treated at Mount Gold. One proved to be suffering from Tuberculous Meningitis. Five recovered, one died of Enteric Fever and Uræmia twelve hours after admission.

One patient was landed at the Port suffering from Enteric Fever, perforation of the intestine and peritonitis ; he was transferred to the South Devon & East Cornwall Hospital for operative treatment.

Chicken-pox. 1083 cases were notified. A large percentage of these cases were visited and examined in their homes to ensure that there was no undiagnosed case of Smallpox amongst them.

No case of Smallpox has been notified during the year.

Pulmonary Tuberculosis. In April a ward was opened at Swilly Hospital for the treatment of women suffering from advanced Tuberculosis. Thirty-seven cases have been admitted ; ten have been discharged, generally at their own request ; seven died.

Three carefully selected patients have been treated with sanocrysin, with very encouraging results ; four other patients are at present undergoing the same treatment.

Four patients have been treated with intravenous injections of calcium chloride. The result of this treatment is at present uncertain.

Gastro-Enteritis. A Ward was opened during the summer for the treatment of Infective Enteritis of children. Owing to the cool summer this disease was not prevalent. Three cases were admitted and discharged cured.

APPENDIX IV

Report on the Plymouth Tuberculosis Dispensaries.

By H. T. CHATFIELD, *M.C.*, M.B., B.CH., D.P.H.

(*Assistant Medical Officer of Health.*)

The following Statement gives the detail of work in connection with the Dispensaries for the year 1927, and, for purposes of comparison, the figures for the past two years are also shown :—

	1925	1926	1927
Attendances at Dispensaries	8,472	10,289	12,003
Number of cases sent to the Dispensaries for advice by Medical Practitioners	132	142	330
Domiciliary Visits to patients' homes	186	246	492
Consultations with Medical Practitioners—			
At homes of patients	36	52	52
Consultations otherwise	31	430	505
Visits paid by Health Visitors and Nurses to the homes of patients	9,172	8,139	11,772
Primary Notifications of Tuberculosis—			
Pulmonary Tuberculosis	389	443	358
Non-Pulmonary Tuberculosis	103	116	115
Average No. of Beds provided in Residential Institutions for patients	137	155	185
Number of patients in Training and Treatment Centres on last day in each year	3	12	21
Number of patients at Efford Colony on last day in each year	30	36	43
Number of X-ray Examinations made	180	183	230
Number of patients afforded Dental Treatment ..	44	59	87

It will be seen that there is a tendency to use the Tuberculosis Department more and more on the part of the general population, as is shown by the very considerable rise in the number of attendances at the Dispensaries.

Closer co-operation between ourselves and Medical Practitioners is also signified therein, in fact, local doctors have sent more patients for advice and treatment during 1927 than in the two former years. This has, of course, and as would be expected, been followed by a similarly large increase in the number of

Domiciliary Visits paid to patients in their own homes, and in consultations with General Practitioners and visits by Health Visitors and Nurses.

In addition, however, to these general remarks I should like to make observations on certain individual items.

Notifications. It is a good sign to see that the number of Primary Notifications of persons suffering from Pulmonary Tuberculosis has fallen below the 1925 figure. This gives us encouragement for the future, as well as a definite proof that our efforts to stem this disease are meeting with some success.

Deaths. These also are on the decline and are another sign of good omen. Nevertheless, there is a type of the disease which is common in early adolescence, and which our forefathers aptly named " Galloping Consumption "—this form of Pulmonary Tuberculosis is not diminishing.

The more chronic form of Pulmonary Tuberculosis which generally has a later incidence is met with in early adolescence, but is comparatively infrequent.

The acute form of Tuberculosis runs a rapid course and is not influenced by Institutional Treatment, nor is it confined to those areas where poverty and overcrowding prevail ; it is met with in both rich and poor.

Institutions—

Didworthy Sanatorium. This Institution, for early cases of Pulmonary Tuberculosis in adults and children of both sexes, still maintains its popularity and the beds have been well maintained during the year.

Additional beds have been provided to meet the demands for admission.

Udal Torre Sanatorium. The beds at this Institution, which is for intermediate and advanced cases of Pulmonary Tuberculosis in adult males only, have also been kept well filled during the year.

Swilly Hospital. Beds for the reception of intermediate and advanced cases of Pulmonary Tuberculosis in adult females were a pressing necessity and the situation was considerably eased by the provision of fifteen beds at this Hospital.

The Institution has been very popular and the beds have been well maintained, and there is still a " Waiting List " of patients for admission.

Outside Institutions—Pulmonary Tuberculosis. We have maintained patients at the St. Barnabas Home, Torquay, all the year and still have a " Waiting List " of patients for admission.

A long Waiting List of intermediate and advanced cases in adult males during the past summer was relieved by sending seven cases to the St. Michael's Home, Axbridge, and we still have some patients at this Institution.

Other cases of Pulmonary Tuberculosis in adult males have been sent to Nordrach-upon-Mendip Sanatorium, and at the King George's Sanatorium for Sailors, Bramshot Place, Liphook, Hampshire.

Outside Institutions—Non-Pulmonary Tuberculosis. For the Institutional Treatment of our cases under this heading we are still at the mercy of outside bodies. The need for an up-to-date Surgical Hospital of our own is still most keenly felt and I am still hoping that the time is not far distant before such an Institution is available for the reception of our cases.

We are still maintaining our patients as far away as Oswestry, Margate, Stanmore, Alton, Bath and Pinner, as well as at the local hospitals.

Our thanks are due to the following Institutions for treating our patients during the year :—

Shropshire Surgical Hospital, Oswestry ; Lord Mayor Treloar Cripples' Hospital, Alton ; Royal Sea Bathing Hospital, Margate ; Children's Orthopædic Hospital, Combe Park, Bath ; Royal National Orthopædic Hospital, Stanmore, Middlesex ; St. Vincent's Home, Eastcote, Pinner, Middlesex ; Royal Albert Hospital, Devonport ; South Devon and East Cornwall Hospital, Plymouth, and, finally, L'Aiglon, Leysin Village, Switzerland.

Training and Treatment Centres. The Colony is the place *par excellence* for a large percentage of patients after discharge from Sanatorium, and especially the intermediate and moderately advanced type of case who are quite unsuited for employment under industrial conditions. Unless, however, a patient has the "Colony Temperament" he or she will not prove a success at the Colony.

The Colony system has not attracted Tuberculous persons as one would have desired. This is evident from the fact that there has been some difficulty in obtaining patients for the two largest Colonies, both of which have been working for some time.

Speaking from observation, I am rather dubious whether the "Colony" can be a commercial success without being state-aided.

Efford Colony, Plymouth. There are 43 patients undergoing Training at this Colony ; 15 of whom reside, with their wives and families, at Efford.

There are fifty children living on the Colony and it is interesting to note that there has not been a new case of Tuberculosis amongst them during the year.

The bulk of the men are employed on Carpentry and they very capably tackle almost anything in this line. During the past year they have made bungalows, revolving shelters, book-cases, step-ladders, meat safes, clothes horses, etc.

Other of the men are employed on electro-plating and the remaining few on boot repairing.

Great credit is due to the Board of Management for the present successful state of the Colony. They have piloted their ship through very rough seas and have, with their foresight, made the Colony a success. During the past year many of the Colonists who are disabled Ex-Service men have had their Pensions reduced and the Board of Management has stepped into the breach by granting these men some remuneration for their work.

That many of the men are maintaining reasonably good health and that their lives have been prolonged is undoubtedly due to the fact that they have been residing at the Colony, where each family has a bungalow, with fresh air and sunshine as constant visitors.

In addition, the families of these men are enjoying good health ; and to maintain this state of affairs must be the ambition of everyone having the interest of these Tuberculous patients at heart.

The people of Plymouth and the surrounding area can do much to keep this Colony running by placing orders for work with them and I do sincerely hope that, following this appeal for work, fresh jobs will be given to the Efford Colony.

Papworth Village Settlement, Papworth Hall, Cambridge. This is one of the older Colonies which I have already mentioned, and we have now 21 Plymouth patients undergoing courses of combined Training and Treatment there. Each patient has the opportunity of " Colonising " at Papworth should they so desire, after having learnt the trade at which their physical condition will allow them to work.

Contacts. On receipt of the notice of death from Tuberculosis or of a Primary Notification of Tuberculosis, a letter is sent inviting all those who have been in " contact " with the person to attend the Dispensary for examination to ascertain if they are free from the disease themselves. The number of persons who attended as Contacts during the year shows an increase over the previous year.

Housing. This problem has yet to be solved. Although several of our cases have obtained Council houses during the year, yet many are still waiting.

In congested areas where home conditions are unsatisfactory the following types of cases are met with :—

(*a*) Those who are eager and willing to obtain better accommodation and can afford to pay the rent.

(*b*) Those who are willing to accept better accommodation but who are slovenly and will not avail themselves of the opportunity afforded to obtain it.

(*c*) Those who absolutely refuse to leave their present dwellings.

(*d*) Those who are very eager and willing to move but who cannot afford the rent of Council houses.

This last type is certainly a problem and here is an opportunity for the Care and After-Care Committee to assist in the payment of rent. On the other hand, and viewing the question from a broad standpoint, it hardly seems right that these unfortunate people should be dependent on a Voluntary Committee for the accommodation which is their obvious necessity. Surely they are entitled to live under desirable, healthy and suitable conditions! The only lasting remedy for them appears to be for the Council to undertake the provision of suitable accommodation at a rental which these people can afford.

To me this seems the best method, and I am sure that it would prove cheaper in the long run, for we should then be creating a healthy community, and surely our aim should be to have nothing less than 100 per cent man power in every individual.

Dental Treatment. Here, again, we show an increase in our work. This forms a very important part in the Treatment of our patients and this section of the work will be increased very considerably, because we are taking advantage of the assistance that Insurance Societies are giving to their Members towards the cost of Dental Treatment and the provision of Dentures.

X-ray Examinations. There is also an appreciable increase here. Under our existing arrangements with the Homœopathic and General Hospital many more patients can be so examined, although, of course, we should have our own apparatus situated at the Main Dispensary.

Care and After-Care Committee. This Voluntary Committee is still most active and working hard to raise funds to help the Tuberculous.

The *Assistance* Sub-Committee continues to help a large number of patients in a variety of ways, and their work is particularly helpful to the Department.

The *Employment and Training* Section has experienced great difficulty in obtaining suitable employment for our patients after their discharge from Residential Institutions.

Is there a possibility of starting a scheme such as they have at Hull, and which is proving such a great success? There Tuberculous men are employed as Official Attendants at the various motor parks, etc., in the city. The work is light and the men are employed only six hours daily.

Evening Clinics. These, which were commenced for those patients who, through their work, could not attend the ordinary Day Clinics, have proved a great success and are appreciated by patients.

Clinics in Districts. Just as the headquarters of an advancing force moves forward with its troops so must a Tuberculosis Scheme advance with the growth of a town. Consequently an additional Sub-Dispensary, in the neighbourhood of Swilly, appears to be a necessity. If this were provided we should have Beaumont House, the Royal Albert Hospital and Swilly forming a triangle which would make attendance at any one of the Clinics comparatively easy, and every patient in the Borough would be within a reasonable distance from a Tuberculosis Dispensary.

Tables and Charts giving details of the work of the Department for the past year are given in the Appendix to this Report.

I should like to take this opportunity of placing on record my appreciation of the co-operation we have enjoyed with other Sub-Departments of the Public Health Service and with General Practitioners.

In conclusion, I express my thanks to the Tuberculosis Dispensary Staff for their unstinted labour and loyalty.

APPENDIX V

Report on Didworthy Sanatorium for 1927.

By A. T. BETTINSON, L.R.C.P., M.R.C.S.

(*Resident Medical Officer*).

General. Didworthy Sanatorium is situated on the southern edge of Dartmoor, in the valley of the Avon, and is about 700 feet above sea level. It is well sheltered by surrounding hills and an east wind is almost unknown.

This year there has been very little sunshine and an excessive rainfall. The total rainfall for the year was 71.79 inches and the number of wet days 208. Much of the rain, however, fell during the night-time, as is usual in this part of Devon.

At Didworthy we are a little world to ourselves ; our nearest village is Brent, which is about two miles distant.

During the year 1927 the number of patients admitted was 156, and the number discharged was 156. The following details apply to Plymouth Council cases only. The number of cases admitted was 150 and the number discharged 151, as against 133 admissions and 115 discharges in 1926.

Results. The following figures show the results of treatment—the cases being grouped in accordance with the memorandum issued by the Ministry of Health.

Cases discharged from January 1st, 1927, to December 31st, 1927.

T.B. minus Group—

Quiescent	35	= 34%
Very much improved	66	= 64.5%
Not improved	2	= 1.5%
	103	

T.B. plus Group I—

Quiescent	7	= 45%
Very much improved	8	= 55%
Not improved	0	
	15	

T.B. plus Group 2—

Quiescent	8	= 30.7%
Very much improved	17	= 65.3%
Not improved	1	= 4%
	26	

T.B. plus Group 3—

Quiescent	0	
Very much improved	3	= 42.8%
Not improved	4	= 57.2%
	7	

If we take the results of treatment without grouping we get the following :—

Discharged Quiescent	33.11%
Discharged very much improved	62.25%
Discharged not improved	4.64%

The average length of stay of each patient was 6–9 months, with the exception of the few cases with a chronic fibrotic condition of the lungs. Patients with the latter condition are rarely kept more than three months ; for there is no chance of a permanent recovery, and they improve as much as they will within two to three months. Indeed, I am of opinion, that in the majority of these cases the Tuberculous process is practically finished, and that we are dealing with a damaged tissue (the Lungs) which is more often than not the seat of secondary infection, by some organism other than the Tubercle Bacillus.

Beds Available. The average number of beds available has been from 72 to 80. The bed state is at present in a flux, due to the pulling down of the boys' shelters and the construction of a new 20-bed block. This year ten revolving shelters have been added (they were constructed at Efford Colony by tuberculous men). This has given us six more beds for women and four for men.

At no period during the year have we had any empty beds, except for a day occasioned by the discharge of one patient and the admission of another. But this loss of patient days rarely occurs, because there is excellent co-operation between the Dispensary at Beaumont House and the Sanatorium.

The beds are allotted as follows: Women, 25; men, 25; children, 30. Sometimes, however, in order to deal with the waiting list, these figures are varied.

I am pleased to state that no deaths have occurred in the institution during this year.

Pathological Section. Our laboratory, although it is but a small room, wedged in between the engine house and the cow sheds, does useful work, as the following figures will show:—

Pathological examinations during 1927—

Sputum examinations	718
Other Pathological examinations ..	165
Total ..	833

Dental Treatment. The dental condition of each patient is examined by me when the patient is admitted; also by the dental surgeon who visits the Institution every six weeks. Eighty-nine patients received dental treatment in the Sanatorium last year. When necessary, artificial dentures are provided for the patient free of charge. Lessons are given in dental hygiene to the children and talks to the adults. I think that, although many have never cleaned their teeth before coming to our Sanatorium, they will continue to do so when they leave; for they realise how much difference a few minutes spent in cleaning teeth make to the feeling of cleanliness and comfort to the mouth. Tuberculosis cannot be treated efficiently if a patient has a mouth full of septic teeth and pus oozing from the gums.

Treatment. Last year I said in my Report that one of the essentials of sanatorium treatment is to keep the patient happy and to create, if it is not already present (and it is often not), a healthy mind. Again this year I say that this is the first essential. The spirit of any Institution can be felt by anyone who has worked in one ; and I am of the opinion that good results and a good spirit bear a definite relation to each other.

I grant that fresh air, sunshine, good food and modern methods of treatment are essentials and help to produce happiness and contentment among our patients ; but, as it was true in the olden days, so is it true to-day, " Mens sana in corpore sano."

Now how can this spirit be obtained, this spirit of the healthy mind directing the welfare of the body ? The doctor must not merely be the doctor but the friend and adviser of his patients, if he is to get the best from them and so be able to give them of his best.

He must show and feel a living interest in all his patients and in all they do ; for his patients know if the doctor is really interested in them and in their progress.

Now discipline (this is a big factor in treatment) cannot be maintained by putting notices on a board. There is only one way in which it can be maintained, and that is by the constant contact between patients and the heads of the Institution ; by this means only can discipline exist.

This we realise more and more in an Institution which contains men, women and children—not, as in a hospital, confined to bed ; but up and about and feeling in most cases very fit with their returning health and strength.

" Occupational Therapy " (and this is the only method of scientific treatment that we have available at present) would be useless without the personal element and enthusiasm of the head of the Institution. This method of treatment, in my opinion, is the soundest for the majority of cases.

The doctor must live with his patients and think with them, if he is to give them the full benefit of his skill—all day and every day.

Our workshops at Didworthy may be primitive, and our gardening, perhaps, would not satisfy the " Hoe and Parks Committee " ; but we are doing good ; of this we are certain, judging by results. Every patient has a pleasant occupation (whereas before he was brooding at home over his disease); he is beautifying his temporary home and, greatest of all, he is getting well. He feels that life, once hopeless, is now full of hope.

The system of my personal administration of "Occupational Therapy" I fully described in my contribution to the Plymouth Annual Report of last year.

Now to speak of other methods of treatment:

We always have a certain number of patients who do not respond to ordinary treatment, and for these we feel that something different should and must be done.

With modern technique, "Artificial Pneumothorax" is of proven value in certain cases; and I should certainly use this method of treatment if I had an X-ray plant. Without an X-ray plant this method of treatment is not scientific and is definitely dangerous. Again, an X-ray plant is a valuable adjunct, determining the progress and extent of the disease; it is our best check on the physical signs, and it reveals disease which may be too deep-seated to show signs by other methods of examination.

It is to be hoped that the Town Council will instal an X-ray plant in the near future. Without it I may be able to do much, yet with it I shall be able to do much more.

Sanocrysin. I have been studying all recent reports on the use of this drug in the treatment of Pulmonary Tuberculosis; and, since it appears to do good in certain types of cases and its use in very small doses is unattended by danger, I am preparing to use it on special cases here.

Open-Air School. The school is a great asset to Didworthy Sanatorium. It keeps the young minds occupied; and although we cannot teach them as much as they would learn in an ordinary school, yet it does keep them in touch with school life. They do not readily lose the knowledge they have already acquired.

The hours of school are as follows: 11 a.m. until 12 p.m. and 2 p.m. until 3.30 p.m. The average number of children attending school for the year was 28, and their ages varied from six to fifteen years. Although these children are delicate, some of them are very good at their school work, whilst some of the older boys are taking a keen interest in shorthand.

Some of the younger children, who at first could not read or write, have shown a marked improvement after some months of kindergarten work.

During the spring and summer months most lessons are taken in the open air ; and the natural surroundings prove a great advantage to the children, especially in their nature studies. Many happy hours were passed by them in the sand pit during the summer. They are clothed in bathing suits, and with their buckets and spades they look the picture of happiness. Their " Sun Treatment " is under my direct supervision.

The anonymous gift of a " Decca " gramophone for the children has given many hours of enjoyment during physical exercises and Folk Dancing lessons.

The total number of attendances made at the school during the present year was 17,779.

Our children are happy children and many do not want to go home when their time comes.

Social Life of Patients. Everything possible is done to keep patients from having any idle time in which to get " fed up," home sick and introspective.

Both men and women have recreation rooms in which all forms of healthy amusement are provided.

We have patients' committees. I preside for the men and the Matron for the women. Much good is done at these committee meetings, where we meet on an equal footing. At the general meetings I give health talks and the whys and wherefores of treatment.

Our two shops have done very well, with an average of £1 per week profit. This money has been utilised by the patients to pay for char-a-banc outings, to buy prizes for the whist drives and for billiard tournaments, and to make grants to needy patients.

Wireless is now installed throughout the Institution. The estimated cost of this work was £200 and it was done entirely by patients. I think that we may proudly boast that no Institution for Tuberculous patients has a better or more efficient installation.

Fortnightly during the winter we have a cinema show, given under the direction of the manager of the Savoy Picture House, Plymouth.

We have started a magazine. It is edited by a patient, and most of the articles are written by patients. We are trying a scheme of transmitting programmes by patients and talks on health subjects and also gramophone records, by connecting a microphone to our wireless wiring system. The patients are very enthusiastic about this, as at one time or another they take part in the performances.

Didworthy is a place of hope, a place full of promise of a strong and new life. As our statistics prove, we expect our patients to get well and healthy and strong. They know this and the best of them work with us, and, together, we secure their victory over disease.

It has been said, with some justification, that Tuberculosis is a disease which eradicates Fools from this overcrowded Island. It is certainly true that the fool, the stupid fellow and the perverse person has but little chance of mastering his early attack of Tuberculosis ; since, owing to his nature, he refuses to follow skilled advice. He ignores the requirements of his doctor : he scorns the advice of the Specialist and of the Expert. He prefers to choose his own stupid, evil and ignorant way, and he goes down the hill, easily and quickly enough. The wise man, on the other hand, prospers ; he climbs the hill to health and fitness, slowly, perhaps, but surely ; for he is sensible and takes the advice of his expert medical advisers. Of the choice made by the wise and of that made by the foolish, we have seen many examples at our Sanatorium at Didworthy.

Finally, I should like to express my appreciation of the help and support given to me by the Committee, by the Medical Officer of Health, by the Matron and all the members of the Staff.

APPENDIX VI

Udal Torre Sanatorium during 1927.

By R. DAVIS, M.C.P. AND S. (Sask.)
(*Resident Medical Officer.*)

The past year has been successful. Much has been done to improve the Sanatorium and the comfort of the patients in it. The situation of the Sanatorium is ideal ; although it is somewhat exposed to east winds, the effect of which is especially felt in some of the wards which have large windows.

Udal Torre is an old building which was designed in the first place as a private house, and it is rather cold and draughty in the winter time. To some extent, central heating would overcome this, but it is better to have too little warmth than a close atmosphere in the rooms of a Sanatorium.

Fresh air, good food and proper rest are the three essentials which determine the recovery of a person suffering from Pulmonary Tuberculosis, and it can be said with confidence that at Udal Torre Sanatorium all these factors are present.

During the past year several improvements have been made at the Institution. Some of the rooms have been redecorated and the outside of the building has been painted. The partition which formerly divided the patients' dining-room has been removed, and this has resulted in better heating and greater convenience in serving of the meals. The wireless set has been put into thorough repair, and extension lines have been laid to the Staff quarters. Modern sputum cups with inside containers of cardboard are now supplied to the patients. The inside container is burnt daily and a new one put in its place.

There are now twelve huts in the grounds. These are constructed to ensure the comfort of the patients. The huts are made to revolve, and each is connected with the Hospital by an electric bell, which is used in emergency to call the Nurse at any time of the day or night.

The patients who live in the huts make their own beds and keep their own huts clean. They far prefer to live in these comfortable huts than in the main hospital building.

A putting green has been made on what was once an unkept plot of ground. It is now really quite a good green, with sufficient space for twelve holes. Tournaments are held each year, and the winner is presented with a shield on which his name is engraved. This shield is subsequently attached to a silver cup given to the Sanatorium by four of the residents at Yelverton.

We have also at Udal Torre a good croquet lawn, and tournaments are held on this. Captain and Mrs. Hamilton, who reside in the neighbourhood, have kindly presented a Challenge Cup for croquet to the Institution.

Lady Astor has given the Institution a bagatelle table and also a Cup for billiards.

Games, like all other forms of employment, distract the patient's mind from himself and his illness, and, in addition, provide for him the exercise which is so necessary a part of his treatment. Those patients who are recovering and fit for light work, are given an hour's employment each day in cleaning the paths and looking after the flower beds and in doing other light work. They have made considerable improvement in the appearance of the grounds by constructing rockeries and reclaiming neglected lawns.

Arrangements have been made for an Instructor to be sent out to the Sanatorium to teach leather work to suitable patients. Leather work can be done by patients in bed, as well as those who are up and about. The work in itself is interesting and is not difficult or tedious.

During the past year two new forms of treatment have been introduced for the benefit of the patients, and considerable success has been found to follow the use of Metagen with Cod Liver Oil. There seems to be no doubt that the second form of treatment, namely, that by Sanocrysin, has a curative effect on certain cases of Pulmonary Tuberculosis. During the course of Sanocrysin treatment, the number of tubercle bacilli in the sputum is much reduced and the health of the patient is greatly improved. It is essential, however, that this compound should only be used on suitable cases. Since I have used Sanocrysin, I have given it to sixteen patients, ten of whom have improved to a marked extent. The estimated cost of treatment for each person to whom Sanocrysin is administered is approximately seven pounds.

There are 39 beds in the Institution, and the average daily occupation of beds for the year 1927 was 38.2 ; in other words, the Institution has been practically full all the year. The total number of patients admitted to the Sanatorium during 1927 was 95. This is less than the two previous years because the patients are remaining for a longer period than formerly. The benefit of this longer stay in hospital is evident, for the patient leaves in a better state of health, and he is away for a longer time from his family and friends, who might possibly become infected if he were at home.

The fact that the hospital was full during the year increased the waiting list, with the result that those patients who are staying at home and waiting for admission became worse in unsuitable home surroundings ; and many of them, when at last they were admitted, were seriously ill. This increased our total number of deaths to 27. Seventeen of these 27 patients died within three months after their admission, and 7 of these 17 died within one month after their admission.

Of the sixty-eight patients discharged during the year, four returned to the Sanatorium ; six went to Papworth, and one of these died there ; two have gone to Efford Colony and are working ; one was sent to St. Barnabas Home, Torquay, another to St. Joseph's Home, Plymouth, and one to St. Michael's Home in Somerset, where he has since died. One was transferred to Didworthy, and one was sent for an operation to the South Devon and East Cornwall Hospital. One was sent back to St. Austell, where he has since died, and one was sent to the Royal National Hospital in Bournemouth.

Forty-nine patients were discharged to their homes, ten of these men returned to work, while thirty-two were able to do light work if they could procure it. The fact that a man has once suffered from Consumption makes it very difficult for him to secure suitable work. This difficulty can only be overcome by the provision of a colony for tuberculous persons.

Patients receive whatever dental treatment is necessary and also are attended by a throat specialist when this appears to be desirable. One patient with lupus of the scalp was sent to the South Devon and East Cornwall Hospital and cured by Artificial Sunlight treatment.

Friends in the villages near the Sanatorium have been very kind to us. The sum of £30 was raised this year by friends in Yelverton and Horrabridge to provide outings for the patients. Books and magazines have been sent to us in large numbers. Concert parties visit the Institution frequently, and the Tramways Band and St. Jude's Choir have given three or four performances during the year. Religious services are held every Sunday evening after tea ; these are non-sectarian, and, with few exceptions all the patients attend.

There is a flourishing canteen in charge of the patients, where tobacco and many useful articles can be obtained. The canteen profits are spent in prizes for the various tournaments.

A sun gauge has been installed in the tower above the roof of the hospital, and patients change the charts at sunset each day. We shall thus be able to estimate the hours of sunshine which we get in the year.

In conclusion, I should like to emphasise the great need for the proper after-care of our patients. Colonies like Papworth or Preston Hall are as essential to the health of the tuberculous person as is the Sanatorium itself. Colonies also serve to separate the tuberculous person from the rest of the population, and their utility cannot be overestimated.

Thanks are due to the Matron and the Nursing Staff, to the Cook, the Kitchen Staff and the Orderlies for the consideration they have shown towards the needs and comforts of the patients at Udal Torre, and for the efficient manner in which they have carried out their duties during the past year.

APPENDIX VII

Annual Report, 1927.

G. D. KETTLEWELL, L.R.C.P., M.R.C.S.

(*Medical Officer in charge.*)

The return of new cases and attendances at the V.D. Treatment Centre in 1927 shows a considerable increase compared with 1926. There were 185 more new cases and 1500 more attendances. The increase is in no way due to a spread of infectious or acute Venereal Disease. It was explained in the report for 1926 that attempts were being made to discover the incidence of Congenital Syphilis in Plymouth, and owing to the success of the scheme it was hoped, as far as time would permit, to continue the investigation. In order to carry out the scheme in a satisfactory manner it was found necessary to put on an extra clinic each week at which these children could be seen, as it was not considered advisable to mix the "innocent" sufferers with the "guilty." Owing to the very large number of attendances (average 25) at this special clinic, it was found necessary in some weeks to have two clinics to cope with the large number of children examined. The higher rate of New Cases is entirely due to the examination of children for Congenital Syphilis.

The figures for Syphilis in an acute or contagious form are highly satisfactory. Patients who contract Syphilis, as a rule, receive some form of treatment. They may, after the seriousness of the disease has been pointed out to them, undergo the full course of treatment, with subsequent observation, and be cured. Unfortunately there are many who are satisfied with the disappearance of active symptoms, and do not complete the cure. These patients may be rendered temporarily non-infectious, but nearly always relapse, and unfortunately are again capable of spreading the disease. It may very roughly be said, that Syphilis, after it has existed in a patient for two or three years, becomes non-infectious, although the patient is still suffering from the disease. The total number of patients for 1927 who could be placed in the above classification was 29 ; of these, 15 were " travelling," or patients who had been previously treated at other towns and were completing their courses at various centres ; they had all contracted the disease outside Plymouth. Fourteen patients were Plymothians, five contracted Syphilis outside Plymouth, the remaining nine were infected in Plymouth—two of them, however, were the wives of patients who had imported the disease from an " outside area." It may fairly be said that there were only *seven* cases of Syphilis contracted in Plymouth in 1927.

It is generally recognised that Syphilis in a contagious form is being rapidly stamped out in the country, but it is probably unique for a Garrison Town of the size of Plymouth to have only seven known cases of Syphilis in a year. It might be said that cases are being treated privately, but from careful enquiry amongst professional men in Plymouth it is found that Syphilis in a contagious form is practically unknown, and that any cases have generally been sent to the Clinic for Treatment.

Congenital Syphilis. One hundred and eighteen patients of various ages suffering from Congenital Disease were seen during the year. It is only proposed to deal with the children of school age in this report. Roughly 4000 children were examined in 1927, of which number 86 were found to be Congenital Syphilitics. These figures give an average of about 2 per cent, which is undoubtedly too low an average. The children who are generally sent to the Clinic for examination might be divided into two classes :—

(*a*) Those obviously suffering from Congenital Syphilis.

(*b*) Those who have no signs of Congenital Syphilis.

The children of the first class " speak " for themselves. The children of the second class are very difficult to deal with. Their history is somewhat as follows—the child has never " got on," " difficult to rear, always moody, irritable, different to other children," " does not get on at school, doesn't grow, etc." The mother states that the child has been seen by many doctors, both private and at out-patient clinics, etc. " Anæmia," " delicate," " tuberculous disease," " the child will outgrow it," etc., have all been suggested, but nothing has ever done the child any good.

The child finally drifts to the V.D. Clinic, where a test reveals the cause of the trouble. Considering the large number of cases of Congenital Syphilis which are known to exist in Plymouth, and the large number which have not yet been discovered, it seems a practical suggestion that the children of class (*b*) type should be sent to the Treatment Centre first, for tests. The test is quick, easy and simple ; in this way much valuable time would be saved, which is at present wasted in taking the child " from pillar to post," without any satisfactory result. It must be taken into consideration, too, that the discovery of one Congenitally Syphilitic child may have far-reaching results. In one particular case it led to the treatment of the father, mother and four children—the whole family.

The result of the examination of children in 1927 is given in Table 8, together with the results of eight previous years. It will be noticed that " Keratitis " (causing a film over the eye) is again the chief trouble. Many of these cases when first brought to the Clinic are unable to see. If treated efficiently and continuously they will improve so greatly that they are, in time, able to read and lead a practically normal life.

The attendances of the children for treatment have been very good, the results of treatment in many cases remarkable, and the parents have been unable adequately to express their gratitude for the general improvement in the health of their children. Medical men, nurses, teachers, and all those who have to deal with children, have given the greatest assistance in this experiment of trying to convert unfit children into fit adults.

APPENDIX VIII

The School Medical Service of Plymouth.

BY

A. T. NANKIVELL, M.D., M.R.C.P., D.P.H.

AND

J. W. E. COLE, M.A., M.B., D.P.H.

General. During the past year the School Medical Service has continued doing its usual work of Inspection and Treatment. The object of our School Medical Service, which we believe we attain, is to make the large majority of children fit and healthy citizens. Obviously, having regard to our present restricted knowledge, some diseases and impaired physical conditions are unavoidable ; but it may be hoped, that with the advance of research and of better scientific elucidation of the causes of disease, a time will come when our present failures will be our future successes. Research, and "field research," such as is possible in the School Medical Service, is helping, year by year, to ascertain the causes of the beginning of disease. The knowledge gained by our work will eventually result in the improvement of medical science, and will give to us a sure basis, from which we may hope to be able to fight for the improvement of the health of the coming generation.

Co-Relation with other Services. Reports of school children attending the Tuberculosis Dispensary and the Venereal Diseases Clinic are regularly received by the School Medical Officer. Reports from the Infant Welfare Centre are sent in as the children are admitted to school. During the year 112 reports have been received from the Venereal Diseases Officer and 1913 from the Tuberculosis Officer.

Apart from such official co-ordination, the friendly relationships existing between the Schools and the other Medical Services of the Borough are of the greatest assistance when investigating and deciding the best course to be taken with individual children.

Improvements. The new Public School was opened on April 26th, 1927. Charles Boys' School has been entirely remodelled. The school rooms are all on one floor, have facilities for ventilation, are well lit, and comfortably heated; the cloak-room accommodation is admirably arranged and ventilated. Both these school buildings are considerable improvements on pre-existing conditions.

In the top floor of Palace Court Boys' School one bath and six shower baths have been installed; this will be referred to later.

The work of the School Medical Service has continued on the same lines as in previous years; that is, children are systematically inspected in order to discover defects, and systematic efforts are made to secure treatment when such is required. The details of these systems have been set out at length in previous reports.

Children are inspected, as required by the Board of Education, three times during their school career, namely, on entrance, at seven years old, and again at twelve years. In addition to this, every child is inspected two or three times a year by a School Nurse to detect lack of cleanliness or presence of vermin. These routine inspections are supplemented by the vigilance of the teachers and parents, who can send any child, who appears to be ailing or defective, to any of the School Clinics.

It must be difficult, though of course not impossible, for a defective child to escape the meshes of this net. The mesh of the net would be finer if every child was inspected annually instead of once in four years, but with the help of school teachers and parents the latter is found in practice to be sufficient.

Findings at Medical Inspection. The actual findings of 1927 are set out in Table 22. The ringworm figures show a marked increase. For several years past a steady fall has been recorded, which I have suggested was due to the increasing use of X-rays in treatment. Last year the services of the X-ray Specialist were not available for some weeks, and the number treated was small; perhaps this fact has assisted this year's rise.

The remaining figures in the Table do not call for special comment.

Infectious Disease.

There has been an epidemic of Chicken-pox during the year, the number of reported cases recording a maximum towards the close. Almost every one of these cases is seen by the Medical Officer of Health or by one of his staff, in order to be certain that we are not entertaining Smallpox unawares in our town. During the year 1562 children were excluded from school suffering from notifiable infectious disease, and 1567 were excluded as contacts ; 1312 throat swabs were taken by School Nurses for bacteriological examination, and 48 of these showed the presence of the Diphtheria Bacillus.

Diphtheria continues to take undiminished toll of child life. The time has come when the people should realise, however, that the means of abolishing this disease are to hand ; and that no child—in Plymouth—need die of Diphtheria, if only the parents will give their consent to the risk being removed from their children's paths.

In skilled hands it is easy to discover which children are liable to suffer from Diphtheria ; and, having found these, they can be immunised. The expenses of isolation and treatment should be compared with the estimated cost of employing the necessary number of doctors and nurses to carry out the above-mentioned discoveries and immunisation. If parents will allow their children to be protected, then no further death from Diphtheria need ever occur in Plymouth.

Rheumatism.

A " Rheumatic Register " was started at the beginning of the year. On this are entered the names of children seen by Assistant School Medical Officers at routine and other inspections and found to show actual rheumatic lesions or to have a history indicative of rheumatic trouble in the past. The number of names on the register at the end of 1927 was 56. These include children who have—to all appearance—nothing wrong, others with heart disease but well compensated and capable of living an ordinary or very slightly modified school life, others with mild chorea ; some of these latter have gone to the Open-Air School and appear to do well there. These children are seen from time to time, and if they show any symptom requiring treatment, the parents are advised accordingly. Acute Rheumatism (Rheumatic Fever) is seldom met with in the course of school medical inspection work.

Following-up. It is obvious that the mere examining of a child and the recording of defects would be of little value were steps not taken to secure treatment of the defect with, when possible, restoration to normal. One of the most important parts of the organisation of the School Medical Service is the visiting of homes by School Nurses to point out to parents the existence of defect—often quite unsuspected—the explaining where and how treatment may be obtained, and getting parents' consent to treatment being given. Reports are also frequently required on home conditions, the ultimate end being the removal of conditions unfavourable to the child, or even the removal of the child to better surroundings. Such work calls for a very large amount of patience, tact and discretion, not to mention powers of physical endurance.

The routine arrangements whereby these visits are arranged and the reports acted upon have been set out in previous reports, and during the past year no changes have been found necessary.

In addition to such visits Nurses attend the various Clinics daily to carry out prescribed treatments or to act on their own initiative until the child can see the Medical Officer at the appointed times. Nurses, when they can be spared from these duties, accompany the Medical Officers when making routine inspections at the schools.

The number of visits paid in connection with this following-up in 1927 was 6608.

The figures in connection with the Nurses' routine visits to schools to ensure a reasonable degree of cleanliness and freedom from vermin are set out in the tables in the Appendix. The girls' and infants' departments have received a slightly greater average number of visits, while the percentage of children found unclean was somewhat less than last year. There was a very marked decrease to the number it was found necessary to cleanse at the Clinics, so it is to be concluded that parents were more readily persuaded to see to it themselves.

Why is it that about one child in twelve is sent to school more or less verminous ? Why do we never succeed in inducing parents to bring this figure down to say 1 in 30 ? There is no mystery as to the means. The proper use of soap, water, comb and personal attention is all that is required. The parents of eleven children can manage it ; presumably to the parent of the twelfth the stumbling-block is " personal attention." Education, and, especially, " Health Education," may show results in the rising generation.

Minor Ailments. These are treated at the three Minor Ailment Clinics. The figures as required by the Board of Education are set out in Table 25.

There were no less than 47,066 attendances made during 1927. The treatment given is soap and water and simple antiseptic dressings. There are hundreds of cases in which the giving of a box of ointment with " instructions " would mean the continuance of the " sore " with increasing chance of complications for an indefinite period, whereas daily visits to the Clinic effect a cure in one or two weeks. In numerous instances no treatment is given, but a visit to a private practitioner or hospital or dispensary is advised. In such instances a Nurse follows up later to see how things are going on.

The majority of new cases are accompanied by their parents, who are advised as required. No drugs or prescriptions are given.

These Clinics act as the Clearing House for the School Medical Service. From them children are sent to receive needed treatment in numerous directions.

Eye Clinic. The Ophthalmic Specialist attends four sessions per week. Once a week a Nurse is there alone. Practically all instances of eye trouble are referred to this Clinic.

There will probably always be a few parents unwilling to believe that a child who has made no complaint can possibly be suffering from defective vision. There are a few others who, knowing that a child cannot see properly, deliberately keep it away from medical inspection for fear that spectacles will be prescribed. Apart from such instances it is impossible for any child to remain long in any Plymouth school with undetected and untreated visual defect.

Ear Disease. A large number of these distressing cases attend the Minor Ailment Clinics, and the best is done for them in the circumstances. The appointment of a Specialist to supervise them and employ up-to-date methods of treatment is sorely needed.

Tonsils and Adenoids.

The arrangements with the Royal Albert Hospital and the Homœopathic Hospital for the treatment of adenoids and enlarged tonsils continues to work satisfactorily. The provision of an Ambulance to take the children home after operation is, however, required.

Crippling Defects and Orthopædics.

The work of the two Clinics continues as heretofore. An Assistant School Medical Officer visits weekly, and the Orthopædic Specialist attends monthly for consultation. Children are massaged and exercised as directed, and splints ordered are supplied and kept in repair. The scheme is very satisfactory so far as it goes. Forty-one new cases were examined and prescribed for either by the School Medical Officer alone or in consultation with Dr. Kennedy, the Orthopædic Specialist ; 355 old cases were similarly dealt with satisfactorily.

Additions required are arrangements with a hospital for the carrying out of certain operations as the need for them arises, and the provision of a class (about 20) on the premises, where certain children who from time to time require periods of uninterrupted treatment could be educated, so preventing loss of time and inconvenience caused by too frequent journeyings.

Children requiring sanatorium or prolonged hospital treatment are sent to institutions in various parts of the country. Seventeen were so provided for on December 31st, 1927.

Dental Defects.

The arrangements for dental inspection and treatment form, under the supervision of the School Medical Officer, a scheme separate from medical inspection and treatment. The end is the conservation of children's teeth ; firstly, by preventing caries or decay, and secondly, checking it by means of " filling " as soon as it has been detected. We seek to attain the first by propaganda, the constant repetition of all the known factors concerning diet, etc., which affect general health, and the teaching of the principles and practice of dental hygiene ; the second results from the systematic labours of the dentists in inspection and treatment. If all children were inspected every month and all children were willing to submit to treatment when advised to do so, extractions would cease and fillings only would have to be recorded. At present, however, an annual inspection is the ideal aimed at. This, when available for all the children, will considerably reduce the instances in which extraction is advisable, but it will not abolish them. A tooth can easily become unsaveable in the course of a year.

However perfect the arrangements for inspection it seems as though there will always be a percentage of parents who decline the opportunity of treatment. Many of these will promise to get it " done privately." Some will keep this promise. Later on others, driven by the pains of exposed nerves or acute abscess, will come along for relief, but the chance of saving the tooth is gone and the unwilling dentist is forced to increase his tally of extractions.

In Plymouth there are still a number of children who are not inspected at all. Few of these voluntarily attend in time for the affected teeth to be saved. Hence the large number of extractions necessary. These numbers could easily be reduced by refusing to deal with any child outside the inspected area, and similarly refusing all those who had declined filling when it was offered them immediately after inspection.

The treatment of toothache was not the reason for establishing a School Dental Service. The one and only reason was the preservation of teeth.

Early in the year it seemed that a third school dentist would be established before this report came to be written, but unfortunately it has not yet been possible to obtain possession of the necessary premises. It should be clearly understood by all who read this Report, that one school dentist can safeguard properly the teeth of about 5000 school children and that is all. We ought in Plymouth to have more than five and slightly less than six school dentists. Probably if we had five, and worked them overtime, we should be able to treat all our children. As it is we have only two school dentists, and so obviously two-fifths alone of our work is done. Three-fifths of our children remain without this most essential service.

The surgeon-dentists report to the following effect :—

" The year 1927 has seen a great increase in the dental work done in the Clinics. This can be accounted for by the fact that the teachers have shown greater interest and parents are becoming more appreciative of our work.

" During the inspection of children at schools and their subsequent attendances at the Clinic, the Head Teachers have given very great help. The inspections have been organised in a splendid manner, and the assistance given in getting the children to attend the Clinic has been the means of an increase in the work. Parents are becoming far more accustomed to the Clinic, and in a good many cases are seeking periodical examination on their own account. The number refusing treatment has greatly decreased. This, no doubt, is one of the results of Health Education.

" The standard of the teeth in schools where periodical inspection is made has greatly improved. Special attention should be given to the infants ; when a child has reached the age of six years there are, in most cases, teeth which have become so destroyed by caries that extractions are absolutely necessary. This is just the age when the first of the permanent teeth are erupting ; if the decayed teeth are allowed to remain they soon affect the new permanent ones, and also stunt the new teeth which are growing underneath them ; on the other hand, when they are extracted the jaw does not grow as it should, and the result is that the second set of teeth are crowded in the mouth and so are very difficult to clean and are liable to decay. Special care given to children as soon as they enter school will eventually greatly reduce the number of teeth which at present have to be extracted."

Open-Air Education.

The work of the two Open-Air Schools has continued as heretofore. The alterations and additions at Efford have been completed. They include a dining-room, kitchen, cloakrooms, and lavatories. The Head Teacher reports as follows :—

" The outstanding feature of the year has been the extensive structural alterations and the provision of additional accommodation. The work lasted for nine months of the year, and as many as six rooms were out of use at once, whilst the cooking had to be carried on in temporary kitchens which were a considerable distance from the house and dining-room. It was therefore somewhat of an achievement for the school to be in being during the whole time. Already we are deriving considerable benefit from the adequate cloakroom and lavatory accommodation and the better dining-rooms and kitchens."

There were 308 children on the registers of the two Open-Air Schools at the end of 1927. There have been 193 admissions during the year and 163 discharges.

The bulk of the children attending these schools are either contacts of tuberculosis or children suspected of tuberculous tendencies. None, however, suffer from active infectious tuberculosis. Practically all are much under the average weight for their age.

An investigation made into the weight of 200 children who had attended the schools for a year shows that on admission they averaged 9-lbs. under the average weight for their average age. At the end of the year they had put on the normal average for the year plus an additional pound. Of course, the food contributed to this excellent result as well as the open air.

Open-air schools are a powerful means of making the weakly strong, and they should also tend to increase the fitness of the normal and tend to keep them fit. Instead of special schools to renovate those debilitated by ordinary closed schools (I do not say that the ordinary closed school is the sole cause of the debility, but it is certainly one cause), why not strike at one of the roots of the trouble by running all schools on open-air principles ? This does not mean lovely lawns and ancient trees. Delightful as these adjuncts are, they do not add a jot to the curative value of the open air. Nor does it assume that children are to sit out in all weathers ; but it does mean that schoolrooms should on fine days be not merely well ventilated but absolutely open, and on wet, cold or windy days protected and warmed but still freely cross-ventilated. In other words, the modern school should be of the pavilion type. Designs on these lines are already in existence, and the fact that all new schools are not so designed merely shows that the facts demonstrated from the experiment of special open-air schools have not yet been generally appreciated. Such schools certainly require more money for ground (2½ acres for 1200 children), but presumably less for building material. If in such schools, meals, or partial meals, were provided for some of the children, the benefits of the present special open-air schools would be available for the whole of the rising generation.

Provision of Meals.

Meals are provided at the Open-Air Schools (three per diem) and at the Special Day School for Mental Defectives (one per diem). The arrangements for those who at various schools bring their midday meal with them are as set forth in the report for 1925.

School Baths. The baths installed at Palace Court are under the care of two Attendants, male and female, and are available on five sessions per week for boys and on five sessions per week for girls. Since the opening on October 13th boys have used the baths on 1311 occasions and girls on 1096 occasions.

Open-Air Schools and Special Schools for Mentally Defective. Bathing under definitely arranged supervision is part of the ordinary routine at these schools. The baths are used weekly by almost all the children.

Camel's Head. Baths in this school are available on one day in the week only, are entirely optional, and there is no specially detailed attendant. During the winter six or seven boys and the same number of girls are stated to take baths, and in the summer a slightly larger number. At this school about 65 per cent of the children live in houses where baths are fitted.

York Street Boys' School. In the Boys' department the baths are available daily and a member of the staff is specially detailed to supervise. About 100–120 boys are bathed weekly.

In the Girls' department an attendant is not available, and about four or five children are bathed weekly. There is a bath fitted in the Junior Mixed Department at the Public School. There is no attendant and the bath is not used. Of the children attending this school about 15 per cent have baths fixed in their own homes.

Co-operation of Parents. Failures in this respect have been alluded to under the headings of Eye treatment and Dental treatment. These are, however, exceptions. The majority of parents gladly avail themselves of the opportunity of medical advice and treatment provided by the Town Council.

Co-operation of School Teachers. The Dentists' tribute to the help of the school teachers has already been recorded. Their indispensable assistance to the School Medical Officers continues as described in previous reports. The success or failure of the Town Council's efforts to render medical benefits available for children depend for success or failure almost as much on the teachers, especially the head teachers, as on the medical staff.

Mental Defectives.

It cannot be too frequently explained that the term "mental defective" as commonly applied includes two different classes: (*a*) those commonly, apart from any definition, described by this term, and (*b*) those to whom the expression would not be applied were it not for the definitions in the Education and Mental Deficiency Acts.

Class (*a*) includes the ordinary idiot and imbecile. When once these unfortunates have been officially detected they pass out of the hands of the Education Authority once and for ever.

Education Authorities are concerned with, and take care of, class (*b*) only if *they are educable children.* They require *special attention* and a *prolonged curriculum,* but at the end of this special course they are fit to enter the world and the commonly called "certificate of mental defect" automatically ceases to exist. It is unfortunate that the term "mental defective" has become applied to such children. As things are no child can be admitted to a Special Instruction School without having been "certified." This "certification" is a totally different thing to the term "certification" as applied to lunatics or adults under the Mental Defectives' Act.

During the year 1927 one hundred and twenty children who had been reported by Head Teachers to be unsuited to the curriculum of ordinary schools were examined and dealt with as follows:—

Recommended for Special Day School for Mentally Defective Children	67
Recommended for Special Class for dull and backward	19
Recommended for further observation at ordinary school	10
Recommended for Open-Air School	4
Recommended for Residential Special School ..	2
Reported to Local Control Authority as—	
Idiot	6
Imbecile	4
Recommended for Deaf School	4
Recommended for Blind School	1
Reported Mild Epilepsy for ordinary school	2
Reported Severe Epilepsy for residential school ..	1
Total ..	120

Mr. Chubb, the Head Master of the Boys' Department at Salisbury Road, reports as follows :—

" I have to report a year of steady progress unmarked by any outstanding event.

" As has been pointed out on several previous occasions a real school garden is an absolute necessity for a school of this type. We are restricted in our appeal to the intelligence of the boys by the present unsatisfactory arrangements.

" Out-of-door activities were considerably curtailed owing to the wet summer and there was a falling off in the standard usually reached by our boys in the Swimming Class.

" The school has been visited by representatives of the Plymouth magistrates, who expressed surprise at the scope of the work being done here.

" The Head Master has been elected a member of the Council of the Central Association for Mental Welfare, and to membership of the Teachers' Registration Council.

" One of the pleasantest features of the work continues to be the custom of old pupils in returning to the school, where they relate their experiences and renew old acquaintances. A warm welcome is always extended to these young men and advice is readily given where one feels advice to be necessary.

" The number on the register at the end of the year was 120 ; 22 were admitted, and 35 left, while the average attendance was 99.3.

" Of the 35 who left, 30 reached the age of exemption, 1 boy went to India with his parents, 2 boys were allowed to leave by cancellation of their certificates before the age of 16, and 2 were sent to the Western Counties Residential Institution at Starcross."

The Special School at Paradise Road ceased to exist on July 31st, the children being transferred to Salisbury Road.

The attendance figures for the Mixed Special School for Mentally Defectives at Salisbury Road are as follows :—

	Boys.	*Girls.*	*Total.*
No. on Register	60	104	164
No. admitted during 1927, including 24 boys and 17 girls from Paradise Road	50	48	98

	Boys.	*Girls.*	*Total.*
No. transferred to Special Senior Boys' Department, including 4 from Paradise Road	—	—	22
No. left during the year, including 8 girls from Paradise Road ..	13	30	43
Average attendance since the union of the schools in September ..	—	—	143

Deaf School. The valuable work of the Deaf School continues. The figures for the year are :—

No. on Register	37
No. of Admissions	6
No. of Discharges	5
Average Attendance	34

Employment of children and young persons :—

No. of medical examinations in connection with Licences to engage in Street Trading	30
No. of medical examinations in connection with Employment Permits	138
No. of medical examinations in connection with issue of Entertainment Permits	32

APPENDIX IX

The Health of The Port of Plymouth.

By DONALD DAVIDSON, M.D., B.S. (Lond.), M.R.C.P. (Lond.), M.R.C.S. (Eng.), D.P.H. (Lond.)

(*Port Medical Officer, Plymouth.*)

The duty of safeguarding the Health of the Port goes on night and day, year in, year out, steady working, continuous watching, without any startling change or innovation ; for ships are punctual things, changes occur slowly, and still the ships come and go as they always have, bringing food, disease, vermin and aliens.

The work of the Port Sanitary Authority resolves into preventing the importation of exotic disease, unwholesome food, and unhealthy and undesirable aliens ; also maintaining the sanitary condition and public health of the crews of all vessels entering the Port. While the benefit of such activity falls partly on Plymouth, this watch at the gateways of the country is conducted chiefly in the general interest of the country at large.

The service being essentially a preventive one, the results are mainly of a negative character and therefore make but small show on paper. Actually the work continues to increase in all its branches from year to year. Nine hundred and twenty-four hours of *nightwork* were put in by your Port Medical Officer this year, approximately 660 mailboats called, 333 tons of foodstuffs were condemned and 15,222 aliens were inspected for landing.

In this connection I am deeply indebted to Dr. Hynes and Dr. Kettlewell, the deputy Medical Officers of the Port, who have always shown themselves ready to help, gracefully, at any hour to give relief when traffic presses. Their invaluable services are really essential for the efficient running of the department. No less am I beholden to your Inspector, Mr. R. W. Weale, for it is his unfailing good cheer at all times, and that tact which comes only with long and sympathetic experience of human nature, which has enabled just 333 tons of foodstuffs to be condemned and disposed of satisfactorily without so much as a single prosecution or complaint arising.

CONTROL OF INFECTIOUS DISEASE.

Every ocean mail steamer coming to Plymouth takes up a Pilot off Rame Head. He is the first person to board the vessel in British waters, and it is his duty to enquire if there has been any infectious disease on board. In the event of Cholera, Plague or Yellow Fever having occurred, he would see that the plague flag (yellow and black borne quarterly) is hoisted where it can be best seen, and would take the ship to anchorage in the quarantine ground in Jennycliffe Bay.

As soon as each mailboat comes to anchor the Customs Officer, in company with the Port Medical Officer and Inspector, goes alongside and puts the question, " Have you had any case or suspected case of Cholera, Plague or Yellow Fever on the voyage ? " If the answer is in the affirmative, the Customs Officer would withhold pratique and inform the Port Medical Officer, who would thereupon take over and deal with the ship in accordance with the Plague, Cholera and Yellow Fever Regulations ; cases and suspected cases being taken to the hospital ship *Flamingo*, quarters disinfected, passengers and crew examined, and the names and addresses of those landing taken and forwarded to the Medical Officer of Health of the district to which they are proceeding. By this means all contacts would be watched daily at their home addresses until the incubation period was safely passed.

The examination on board of crew and passengers being satisfactorily completed, the vessel would be permitted to proceed on her voyage, particulars being wired to the Ministry of Health and to the Sanitary Authority at her next port of call.

But for Smallpox, Typhus and other infectious diseases, the Customs have power neither to detain nor to withhold pratique. By the harmonious working of this Department with His Majesty's Customs, all such vessels would be held up, nevertheless, and the matter brought to the notice of the Medical Officer of Health of the Port, who would investigate the case and deal with it in a similar manner under the Port Sanitary Authorities (Infectious Diseases) Regulations, 1920.

In order to expedite the landing of mails and passengers it is usual for the Port Medical Officer to go out at the same time as the other boarding officials on the tender that brings passengers and mails ashore.

To all Masters and Surgeons, instructions are issued by us in three languages, setting forth the various infectious diseases, together with the standing arrangements for accommodating each at Plymouth, and the Master is requested to send, when within 24 hours of shore, wireless information respecting the health of his ship. On receipt of this news, all necessary preparations can be made to transfer the case to the hospital ship *Flamingo* or to the Borough Fever Hospital ashore, according to the nature of the disease.

The ambulances of the Borough Fever Hospital are always available for removing infectious cases, while St. John Ambulance Corps is at the service of non-infectious cases.

As the Great Western Railway will not carry infectious disease on its tenders, the case would be taken off in the motor launch *Clytie*, or should weather conditions prevent the *Clytie* getting alongside a tug would be chartered to take off the case ; and provided masters of ships give timely information in accordance with the printed instructions no delay would occur ; but where, as has frequently happened, no intimation of infection has been given until the tender comes alongside, then delay is inevitable.

Cargo boats are dealt with by the Customs in precisely the same manner as mailboats, and are visited by your Inspector, Mr. R. W. Weale. The steam disinfector at Mount Gold Hospital is used for verminous clothing and infected articles from the hospital ship and vessels. Infected quarters on the ships are disinfected by " Sulphume," Sulphur Dioxide liquified by pressure and kept in cannisters ready for immediate use.

CHOLERA, PLAGUE AND YELLOW FEVER PRECAUTIONS.

Cholera, which has been smouldering in the East from time immemorial, has recently shown signs of renewed activity. India, China and the Persian Gulf in particular are seething with it, and all cases of sickness on vessels from that part are very carefully investigated.

The only ship dealt with here that had had Cholera on board was the *Morvada* from India, which had landed a case at Madras, where diagnosis was confirmed. When the vessel arrived at Plymouth, four and a half weeks later, no further developments had occurred.

Plague, while endemic in Africa, Central America, Asia (especially in India) and Eastern Europe, has not approached nearer to England than Lisbon, where a series of cases have occurred. No infected or suspected ships arrived here during the year. An outbreak of human plague in the Argentine, preceded presumably by an epizootic epidemic of the same disease among rats, had a sequel in London, where a number of rats infected with plague were found dead on board grain ships from Rosario. Since then three grain boats have put into Plymouth, having left Rosario at the time when Plague was present in that neighbourhood. Plague precautions were closely adhered to and all steps taken to prevent rats leaving the ship. A number of black rats were caught and examined bacteriologically, but no Plague was found during 1927.

Yellow Fever is spread by the tiger mosquito, *Stegomyia Fasciata*, and by no other. This mosquito does not exist in England and even if introduced could not live in so cold a clime. No case had occurred on any vessel entering the port this year, but mail-boats arrive every week from the West Coast of Africa, where this fatal disease still continues to find many victims. Especial vigilance is exercised in respect of these boats.

SMALLPOX.

While the Smallpox hospital ashore is being built, the hospital ship *Flamingo* continues to give good service and is ever ready for cases, particularly sea-borne. Twenty beds are kept ready for immediate use, and at short notice accommodation could be made for another twenty. Vessels infected with Smallpox are frequently putting into Plymouth.

In my opinion, sea-borne Smallpox should be included by regulations in the same category as Cholera, Plague and Yellow Fever, and treated in the same manner by the boarding officer of H.M. Customs, infected ships to fly a special flag by day and show special lights by night similar to the latter diseases.

VENEREAL DISEASES.

In common with other ports, both in this country and abroad, gratuitous treatment is offered to all seamen suffering from Venereal Disease, irrespective of nationality.

Leaflets are distributed where necessary on vessels arriving at the Port. The leaflets contain anti-venereal propaganda, a summary of the principal symptoms of these diseases which might enable a seaman to seek advice as soon as possible after infection, together with the times for applying to the V.D. Clinic.

Dr. Kettlewell holds his clinics at the South Devon and East Cornwall Hospital daily, and there seamen receive treatment for as long as they remain in port and supplies of medicine for continuing treatment at sea until they reach next port, where further treatment can be obtained. The whole problem of continuous treatment has been greatly simplified by International Agreement to the effect that treatment may be uninterrupted, relentless, until the disease is killed. In this connection 24 cases of Syphilis and 24 cases of Gonorrhœa were treated during the year.

OYSTER FISHERIES.

There are two groups of oyster beds within the area of the Port Sanitary Authority.

I. In the Tamar, from Cargreen to Rubble Bank buoy ; in St. Germans River, from Tregantle to Blackrock Point. The oysters are found growing naturally in the bed of the river and are obtained by dredging. Dredging commences on the 2nd February and finishes on the 16th April. The approximate number of the season's catch was about 100,000, considerably less than last year. The quantity decreases year by year and as the living oysters decrease so the dead shells increase. The boatmen locally attribute the rising mortality to contamination of water by oil from vessels. More probably it is simply a matter of over-fishing. It is usually considered that too many oysters have been removed when the catch falls below 100 oysters per man per day. This year the catch fell below that figure.

If, when this state of affairs is reached, dredging is still continued, then there is a grave danger that the numbers will fall so low that, at spawning time, the fewer spermatozoa discharged by the male oysters may get lost looking for the fewer ova discharged by the female oysters.

Thus, because the mature oysters are fewer, the larvæ will be much fewer ; and because the larvæ are much fewer, they will be hunted with greater energy by those fishes that prey upon the larval oysters, and so, by reason of this vicious circle, insufficient may survive the hazards of early life to maintain the oyster population. Overfishing of this sort has happened elsewhere and the beds have not always recovered. The picture is further complicated by cyclical variations that occur in the food supply of the larval oysters. What exactly constitutes the food of the larvæ is not definitely known, but it is presumably certain to be of the animalculæ that infest tidal waters ; and such animalculæ vary greatly in numbers from year to year, and often come and go in cycles extending over many years.

It may be that we are now going through a period deficient in suitable food, not only for the larvæ of the oyster but also for that of the crab and lobster. The workers on the dredgers now find the living anything but a remunerative one, and it would be wise if they desisted for a few years. Being now such an unprofitable business the loss would not be felt.

As these layings are in water heavily contaminated by sewage the oysters must be relayed before being offered for sale to the public.

II. The whole catch has been sent to Mr. Kingcome, of the Yealm Oyster Fisheries, Steer Point. Until this year, his beds have been used solely for relaying fully grown oysters until purification should be complete. This requires three to four weeks, but often they lie for about six months, meantime about 40 per cent die.

But, apart from relaying, an attempt has been made this year for the first time of breeding and rearing the oysters on the spot.

In the spring some twenty female pregnant oysters were placed in each tank, together with a large number of curved tiles. The spat ejected by the mother oysters settles on the under-surface of the clean tiles and grows into baby oysters which become large enough to resist the onslaught of crabs in about one year, when they are planted out in the beds further down the river, and in another three years are sufficiently large for market.

The experiment has so far been quite successful, two or three small oysters being present on each tile, a total of 5000 oysters. It is hoped that the numbers will be much greater when the problem is solved of feeding the young oysters and of maintaining them at an even temperature. Bacteriological examination of samples taken from Saltash layings showed 10 to 100 Bacillus Coli per oyster ; that is to say, that without purification they would be unfit for food.

Oysters from Yealm layings averaged between 25 and 50 Bacillus Coli per oyster. This is satisfactory. Examination of the water in the tanks and in the River Yealm outside the tanks and over the beds, showed Bacillus Coli to be absent from 5 ccs. The water of this river is pure enough for oysters. The water in the tanks showed Bacillus Coli to be absent from 2 ccs., in one case, and 5 ccs. in the other.

OTHER SHELLFISH.

Other Shellfish are found around the Coast and consumed in Plymouth. Lobsters, Crabs, Crayfish, Winkles, Queens, Limpets, Prawns—all are thoroughly cooked before being offered for sale to the public.

Of the few cases of Typhoid Fever that occurred in Plymouth during 1927, in no case were Shellfish implicated as the cause.

HOUSEBOATS.

The great majority of the houseboats that lie within the Port Sanitary Authority are moored up the River Yealm. They are inhabited only in the summer, and then often only at week-ends.

Houseboats are also placed in Stonehouse Pool, Hooe Lake, and along the foreshore from Devonport to Calstock. These are used as permanent residences, and, although space inside is limited, there is nothing incompatible with health.

All houseboats are frequently inspected. Their sanitary condition is excellent and no overcrowding is permitted.

WATER BOATS.

Fresh water is supplied direct from the Corporation mains to vessels as they lie alongside the various wharves and quays ; but in the case of vessels lying off the shore, the water is supplied by water boats, of which there are two—the *Rescue* and *John Wesley*. These boats contain galvanised iron tanks holding 4000 and 4500 gallons respectively. The tanks are normally kept empty, being filled up only when required for use, and from time to time are cleaned out by steam. The general condition of tanks, hose-pipes and appliances is satisfactory. Samples of water taken from the tanks and from the water mains on shore appeared clean and on bacteriological examination proved to contain : Town main on Barbican, B. Coli in 20 ccs., not in 10 ccs. ; *John Wesley*, B. Coli in 5 ccs., not in 2 ccs. ; and *Rescue*, B. Coli not in 50 ccs.

BATHING POOLS.

The bathing pools along the foreshore, which conduce so much towards the public health, are examined weekly. Although at times during the rush hours in summer the water has been considerably polluted, yet on the whole the water remains remarkably clean, particularly before breakfast ; Bacillus Coli was found constantly in 1cc., and almost always in $\frac{1}{10}$ cc. (See Table 43.)

MEDICAL WORK UNDER THE ALIENS' ORDER, 1920.

Work under this order is very heavy during the summer months and is steadily increasing year by year. This year 2,733 more aliens and 48 more boats arrived at Plymouth. In spite of the greatly increasing work, the spirit of the Order is adequately served—that no alien be allowed to land who may be a danger to the community by reason of infectious disease, or a burden on the community by reason of inability to support himself. (See Table 44.)

FOOD AND SANITARY INSPECTION.

I am indebted to Mr. R. W. Weale, the food and sanitary inspector, for the following reports of foodstuffs and the sanitary condition of the Port :—

Foodstuffs. During the past year 554 vessels were dealt with under the Public Health (Imported Food) Regulations, 1925–1926, including 356 from Foreign and 198 from Coastal Ports, the majority of vessels bringing fruit and vegetables from France. Vessels arriving with grain cargoes from foreign ports were also dealt with under the Rats and Mice (Destruction) Act, 1919, and for precautions against the importation of plague.

PUBLIC HEALTH (IMPORTED FOOD) REGULATIONS, 1925–1926.

The principal landing wharves and docks for all foodstuffs discharging at Plymouth are the Great Western Docks, Millbay, Sutton Pool, Victoria Wharves and Messrs. Burnard & Alger, Ltd., at Cattedown. The following lines of steamers also call at the Great Western Docks for the purpose of landing passengers and discharging foodstuffs and general cargo, viz. : Clyde Shipping Company, Plymouth, Channel Islands & Brittany S.S. Company, British Steam Navigation Co., Holland Steamship Company, Hutchinson Line, Gothenburg Line, Spillers and Bakers.

PUBLIC HEALTH (PRESERVATIVES, ETC., IN FOOD) REGULATIONS, 1925–27.

These regulations prohibiting the importation of certain foods containing objectionable preservative and colouring matter came into operation this year.

Several thousand pounds weight of Boraxed Hams have been dealt with and condemned as unfit for human consumption in this country. Permission was given, however, for the hams to be exported, and parcels have been sent to all parts of the Continent ; each case sent from here has been notified to the Medical Officer of the Port to which the cases were re-shipped for exportation and the contents there verified.

Under the same regulations, samples of pickles were taken and forwarded to the Public Analyst for analytical examination, with negative results for the presence of preservatives.

PUBLIC HEALTH (IMPORTED MILK) REGULATIONS, 1926.

The only form in which milk enters the port is as condensed or dried milk. To such milk these regulations do not apply.

Care is exercised in the examination of all foodstuffs landed, particularly canned goods, fruit and vegetables (Table 41). The total weight of foodstuffs condemned as unsound, unwholesome or unfit for human consumption was 333 tons.

Stores and sheds, particularly those used for the storage of foodstuffs, are kept in a clean and good condition by periodical limewashing, scrubbing or washing through, and the constant sweeping and removal of all rubbish and accumulations of refuse.

Sanitary Inspection.

During the year 3282 vessels have been examined, the registered tonnage being a record one of 6,196,506 tons. These vessels consisted of 1021 steamers, 181 sail, 132 fishing and 118 motor vessels trading from foreign ports; and 1131 steamers, 280 sail, 92 fishing and 327 motor boats trading coastwise.

One hundred and seventy-two informal notices were served to remedy 847 sanitary defects, and for the deratisation of both docks and vessels; the following table shows their classification :—

Nationality of Vessel.	Number inspected during 1927.	Defects of original construction.	Structural defects through wear and tear.	Dirt, vermin, and other conditions prejudicial to health.
British	2527	3	107	435
Other Nations ..	755	3	42	257
TOTAL ..	3282	6	149	692

The remedying of the defects has generally been dealt with in the Port prior to the vessel's departure; but, should it be found impracticable, owing to time and circumstances, to do the work before sailing, permission has been given to remedy the defects during the round trip or at the terminal port. In such a case a duplicate notice has been forwarded to the Medical Officer of the

Port to which the vessel was proceeding and to the Owners. On all occasions the instructions given have been satisfactorily obeyed.

Although it is a very slow process, I find that the general condition of vessels is improving and the crews themselves are beginning to realise the value and importance of keeping their quarters clean.

Crews' quarters in the newly built vessels are conspicuous by the improvement made in the position and construction of living space, also bathrooms are provided and rooms set apart for meals.

On the 23rd September last the maiden voyage was made by one of the Clyde Shipping Company's steamers to this Port, when a close inspection was made. The crew's quarters, bathrooms and W.C.'s are built in the after part of the vessel, with a dining-room separate from their living quarters ; store rooms and general living room are rat proof and the whole fitting is a striking improvement on the average quarters in coastwise vessels.

At the same time it would greatly improve matters if all enclosed spaces could be made rat-proof, and I shall be glad to see that day when rat-proofing of cabins, crews' spaces, and storerooms will be made compulsory in all newly constructed vessels.

A detailed list of the sanitary defects found during the year are given in Table 40.

Vessels discharging cargoes of grain from foreign ports have been dealt with under the Plague Order, 1907, the Rats and Mice (Destruction) Act, 1919, and the Port Sanitary Authorities (Infectious Diseases) Regulations, 1920. The following instructions have been printed ; and are placed on board each vessel when it comes alongside : (i) Ships to be moored not less than 6 feet from the wharf ; (ii) Gangways to be removed at night after working hours ; (iii) Rat guards to be placed on all hawsers leading from the ship to the shore. Should there be an insufficient number of rat guards the hawsers are to be frapped with canvas and freshly tarred every night as a temporary measure.

The ratcatchers attached to the Department visit the vessels and take such steps as may be considered necessary to exterminate rats on board, using traps, dogs, cats, smoke machines and poison baits.

Three vessels arrived from plague-infected areas, and on these vessels we caught 134 rats (122 black and 12 brown), their bodies being macroscopically or microscopically examined by the Borough Pathologist. On no occasion has evidence of plague been reported.

I am pleased to report that a marked increase has occurred in the number of rats destroyed since the employment of ratcatchers. The original ratcatcher, who has now been on duty for eighteen months, was doing good work, but he was quite unable to cope with the whole extent of the docks. Consequently a second man was engaged in August to deal with the Eastern District.

The work of rendering the warehouses and stores in the docks rat-free has been continued with renewed energy. Measures are being taken under the Rats and Mice (Destruction) Act, 1919, to compel Owners and Occupiers to destroy the rats on their premises.

In all, 13,377 rats were caught during the year by traps and dogs, with the aid of a smoke machine ; 26,618 baits were laid, of which 7,012 disappeared, presumably eaten by the rodents, whose bodies, however, were not recovered as they go to their burrows to die. The total mortality, therefore, probably exceeds 20,000 rats killed during the year.

There are still a number of old warehouses made of wood, with wooden floors, and disused sheds that afford ideal breeding places for rats. Constant pressure is brought to bear upon the owners to replace these by concrete structure, with concrete floors raised above the level of the ground on piles to the height of the chassis of a lorry and with a projecting ledge running round to render it almost impossible for a rat to enter except by the door or inside a package.

An excellent example of a rat-proof warehouse, which might be copied to advantage, is to be seen at the Eastern end of Cattedown.

The concreting of one of the old sheds and building up of its sides has resulted in the disappearance of the black rats that were frequently caught there. Concrete floors have been substituted for wood and the shed is now practically free of rats. (See Table 39.)

THE PURITY OF THE SOUND.

Complaints having arisen about the pollution of the waters of the port by oil, acid and sewage, these points have each been carefully investigated.

(1) Oil.

Frequently there may be seen floating on the surface near the shore a coloured film of oil. Generally a quantity of small flotsam is entangled in it, and the whole heaves to and fro in some eddy among the rocks or around shipping at the quayside.

Oozing down the Cattewater it clings to the sides of every vessel it meets. Nothing to the fishing and trading ships! but what lurid language it brings to the lips of the owner of each neat white yacht, which it so affectionately embraces.

A southerly wind blows it lightly over the water into the bathing places, and while the wind continues to blow from the south so long the oil remains, added to at each flood tide, and at each ebb as the water recedes so it leaves behind an oily coating on the shingle of the beach, on the concrete steps and walls of the pools and on the water within them. Every bather as he leaves the water must pass through the oil.

Seagulls settling upon the water find the feathers of their wings gummed together and flounder helplessly, till washed up on the rocks, there to die of starvation or be devoured by rats.

It is doubtful if oil has any detrimental effect on fish life. Certainly oxygen can pass through a layer of oil, and there is, therefore, no danger of fish being killed, even by much larger quantities of oil than ever appear in the Port.

Long and careful investigation shows that this contamination arises not from one but from several sources.

Ships of all kinds accumulate oil in the bilges, and when bilges are pumped out the globules of oil bubble up around the ship. The quantity from this source must be small, and the oil being fairly light should soon evaporate.

More serious is that which is discharged from oil-burning steamers, for there we have a heavy, brown, crude oil that will not evaporate. With the exception of battleships very few oil-burners come right into the docks. The battleships proceed up the Tamar, and there is reason to think that they are responsible for much of the contamination of that river.

It would be a gracious act if the Admiralty were to issue an order that no oily refuse should be discharged within three miles of land. Even from three miles out favourable wind and tide could bring it ashore. It should be taken such a distance that there is no possibility of it coming back. Better still would be to recover the oil or burn it on shore as fuel. But that rests with the Admiralty, over whose ships the Port Sanitary Authority has no jurisdiction whatever.

The various petrol stores near Laira are innocent. The greatest care is exercised as the spirit is pumped from ship to shore and shore to ship.

The effluent from certain works on the shores of the Cattewater has come under suspicion ; it has been watched and samples have been taken and analysed, but so far with negative results in every case.

Evidence is accumulating that points to the common sewers as the source of much of the oil. Just how the oil gets into the sewers is not certain ; some, no doubt, washes off the roads ; probably the owners of garages, both public and private, pour down the drain the waste lubricants from the sumps of their cars. When we consider that there are about 8000 motor vehicles in the borough, and from each motor there is drained off, say, 5 to 10 gallons of waste oil per annum, then it follows that from this source alone many thousand gallons of oil must be discharged into the Sound every year. That some of it might find its way to the bottom of the Sound, weighed down in intimate mixture with sand and mud, was a possibility ; but samples of mud have been dredged from all parts of the Sound where mud was to be found. The oil was estimated, but oil was never found there in significant quantities. The oil that comes from the sewers is mixed with nothing ; it floats and remains floating.

The Medical Officer of Health is at present enquiring into the possibilities of recovering the oil by fitting oil traps to the principal sewers.

(II) Acids. A highly acid trade effluent is discharged by one outfall in Cattewater. Whatever damage the acid may do to moorings and iron ships near by, there is nothing to show that it is injurious to health.

(III) Sewage. A systematic investigation of the state of the Sound in respect of sewage pollution has been conducted during the latter half of the year. Samples of water, both superficial and deep, have been taken under various conditions of wind and tide, and the amount of Nitrite (NO_2) estimated in each sample. After a small deduction has been made for the trace of Nitrite normally present in pure sea water, the amount of Nitrite in any sample may be taken as a relative measure of the amount of sewage there.

By means of many hundreds of samples thus taken at regular intervals, generally 50 yards apart, the exact courses of the sewage-polluted streams have been traced. The results found by the nitrite estimation have been checked by following the course of a bladder of fresh water floating just awash.

Roughly seven million gallons of sewage from two hundred and twelve thousand people is discharged daily into the tidal waters of the port without treatment of any kind. The main sewer is at Rusty Anchor, but there are fourteen other subsidiary outfalls up Cattewater and Hamoaze and one at Fisher's Nose.

That no nuisance ordinarily arises is attributable partly to the large quantity of water with which the sewage is diluted, but principally to the direction of the currents, which carry the sewage as it is discharged away to sea.

The amount of fresh water coming down the Hamoaze and Cattewater is small ; the dilution that occurs in these rivers is due mainly to the salt water that fills and flushes them out every tide. To a certain extent the fresh water flows over the surface of the salt, but, even so, the water, at all depths at its greatest dilution at high tide, is polluted.

With the turn of the tide the contaminated streams from

Hamoaze and Cattewater meet and sweep out between Drake's Island and Batten Breakwater, the one by the Asia Pass, the other by the Smeaton Pass. Two or three hours after high tide the sewage is released ; that from the outfalls at Eastern King (3 feet) and Rusty Anchor (6 feet and 4 feet 6 inches) is caught up in the northern edge of the stream from Hamoaze ; rarely in the Cattewater stream. That from the outfalls at Fisher's Nose (3 feet) and in the Cattewater is caught up in the Cattewater stream and carried along near shore to Rusty Anchor, where it meets the full force of the Hamoaze stream ; it does not mix with it, but is turned sharply back again upon itself, and the streams wind thus side by side through the Eastern Channel to the sea. (See Charts).

A certain amount of Hamoaze water also flows out over the Bridge ; while offshoots of the Cattewater stream follow the coastline round even as far as Rusty Anchor before spreading out over the winter shoal to rejoin the parent stream. Close inshore, between Rusty Anchor and Fisher's Nose, where the bathing pools have been made, the water moves very slowly, often almost stagnant, or small eddies may be formed.

This is the normal condition and course of the currents in calm weather with little wind ; but when the wind blows from the South, South-West or even South-East the sewage, which is lighter than salt water and therefore floats on the surface, is blown inshore and distributed along the coast. From the Western outfalls it can only get as far as Rusty Anchor, where it is forced out by the Cattewater Stream, and so, short of a south-westerly gale, the bathing places are protected from sewage pollution from the Western outfalls. But from the Eastern outfalls, especially the one at Fisher's Nose, even a moderate wind will blow the sewage into the Corinthian Yacht Club and then along all the bathing places in turn. The gross pollution to which they are periodically subjected arises almost exclusively from this one source, the three-foot sewage outfall at Fisher's Nose.

MISCELLANEOUS.

Several new steamship lines are making Plymouth a port of call.

The " Bibby Line " is now operating a fortnightly service from India. The Pacific Steam Navigation Company is inaugurating a fortnightly service from South America to begin early in the new year, and the Blue Star Line, also from South America, will run a regular service when the number of passengers justifies it. These vessels are in addition to the regular callers.

By the addition of their new ship, the magnificent *Ile de France*, the French Line are now enabled to maintain fortnightly callings, and the convenience of the Port of Plymouth is admirably demonstrated when one sees this huge ferry boat of 43,574 tons come and go, finding safe anchorage in the Sound in all weathers and at all states of the tide.

For some years the hospital ship *Flamingo* has been troubled with inboard weeping, causing much dampness, particularly of the main ward. The caulking of her sides had worked out and water was leaking through between the seams. It was decided this year not to dry-dock her, but to re-caulk the sides for 60-feet on level of the main ward. This has been carried out satisfactorily and the weeping stopped, but I should recommend that the whole of the ship be caulked in similar manner.

The motor launch *Clytie* has been overhauled. No repairs were needed. She also continues to give good service.

It is with great pleasure that I note that the department is to have the benefit of Mr. Weale's experience and efficient service for yet another two years.

Finally, I should like to acknowledge my gratitude to the Medical Officer of Health for his helpful suggestions and kindly consideration of myself and the staff ; also my thanks are due to the Naval Authorities, to the Officers of H.M. Customs, the Immigration Officers, Shipping Agents, the Staff of the Marine Biological Laboratory, Officials of the Great Western Railway and to others, with whom I work, for their co-operation and willing assistance at all times.

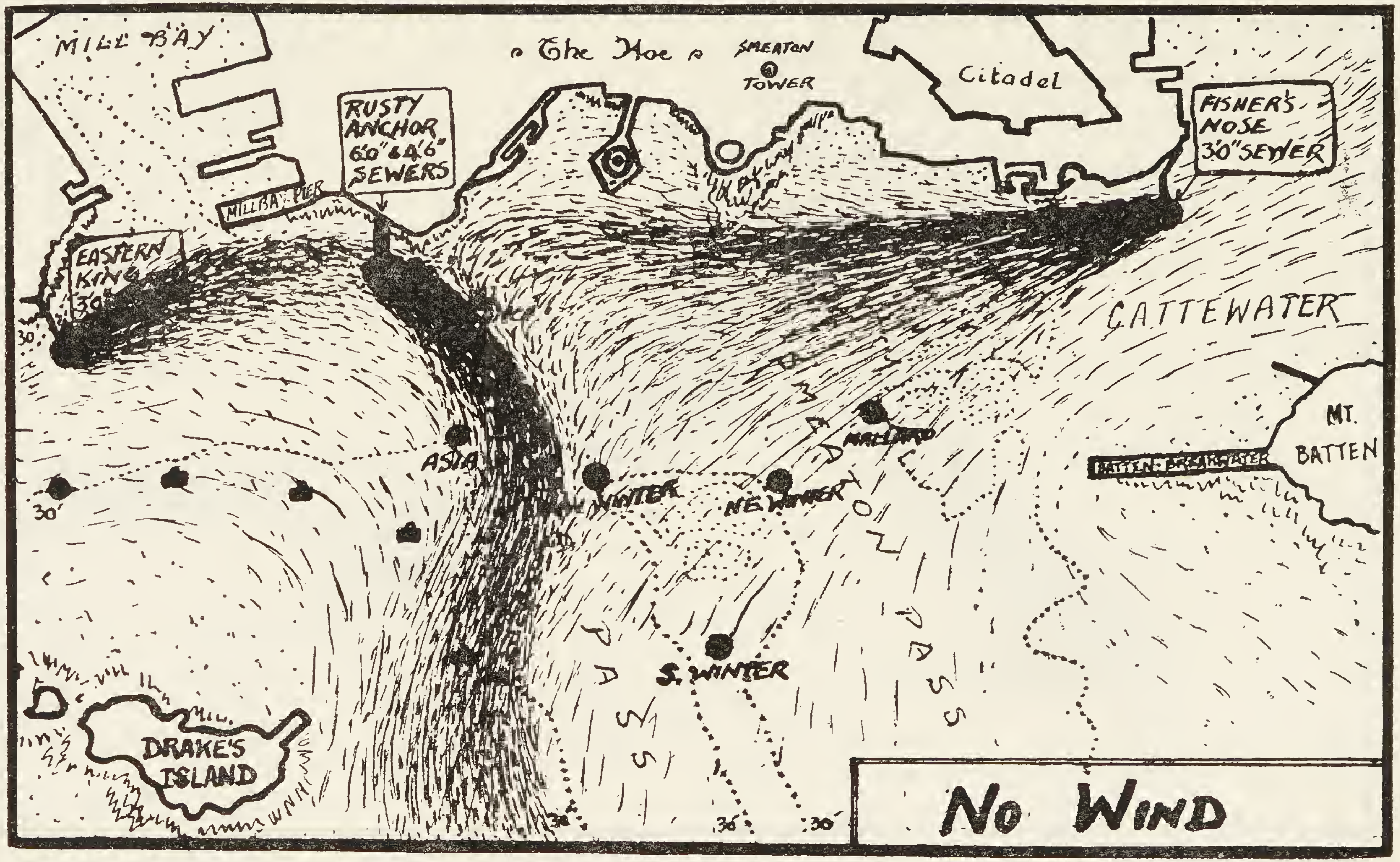
CHARTS OF PLYMOUTH SOUND.

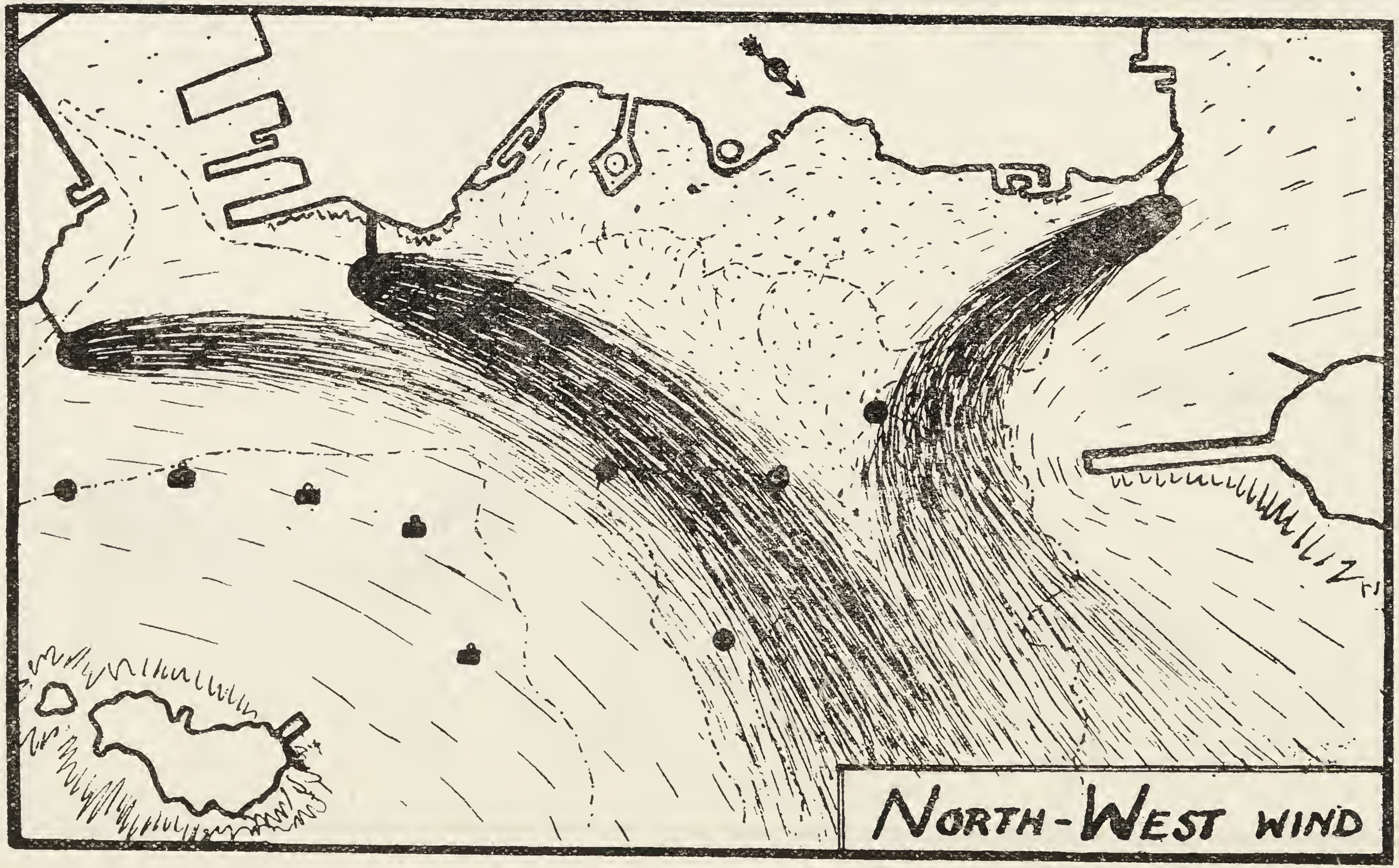
Showing the Surface Currents, One Hour Before Low Tide.

Course of the sewage effluents or currents from the several outfalls at Fisher's Nose, Rusty Anchor, and Eastern King, showing how all these effluents normally escape safely to sea ; but how by strong southerly winds the discharge from Fisher's Nose may be blown inshore, to hazard the health of the Town and to the detriment of the bathing amenities.

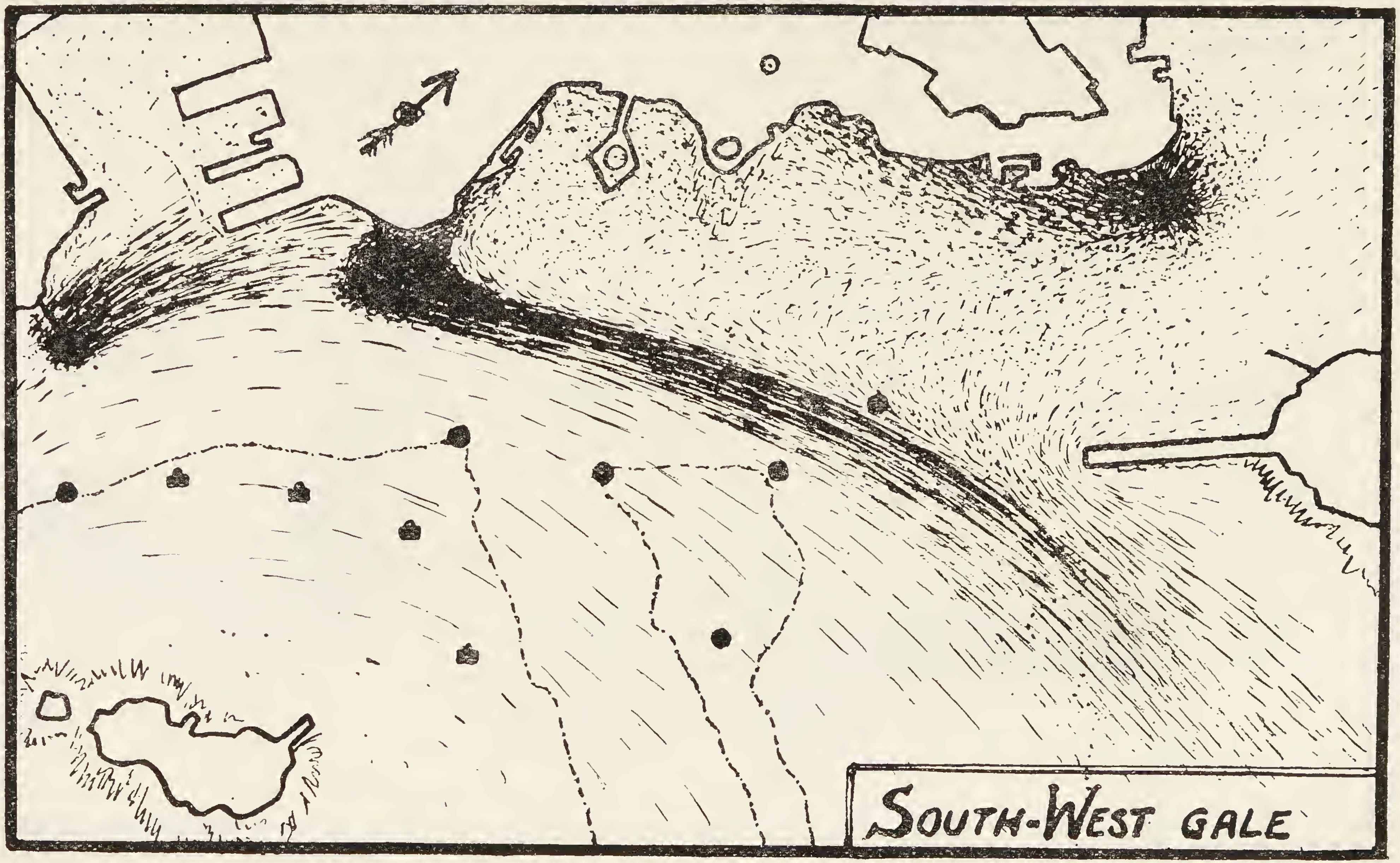
Buoys shown thus : ● ■

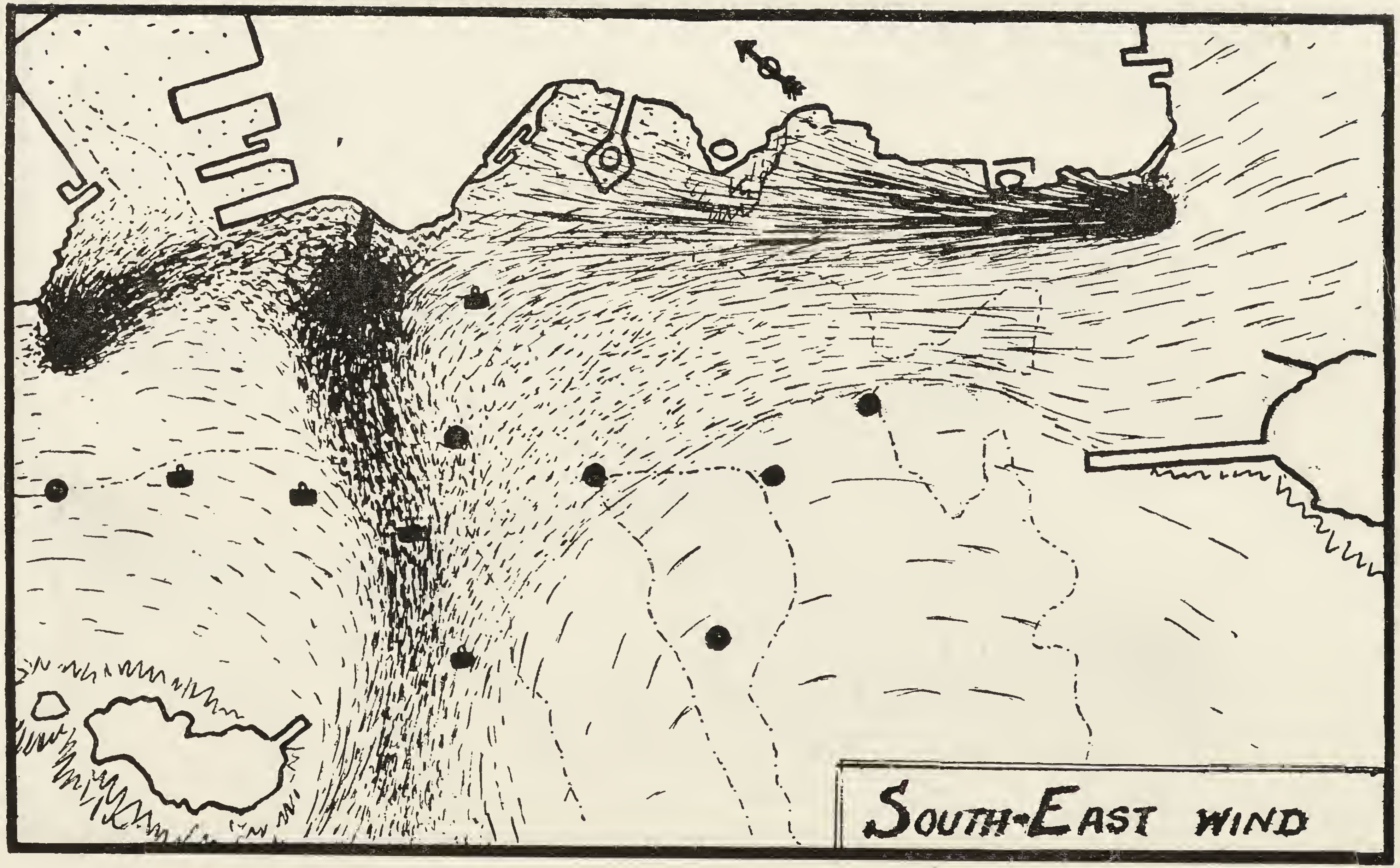
5 fathom (30-ft.) Sounding thus : .—.—.—.—.—.


MILL BAY
The Hoe
SMEATON TOWER
Citadel
RUSTY ANCHOR 6'0" & 4'6" SEWERS
MILLBAY PIER
EASTERN KING 30"
FISHER'S NOSE 3'0" SEWER
CATTEWATER
MT. BATTEN
BATTEN BREAKWATER
ASIA
WINTER
NE WINTER
MALLARD
S. WINTER
SMEATON PASS
PASS
DRAKE'S ISLAND
30'
NO WIND

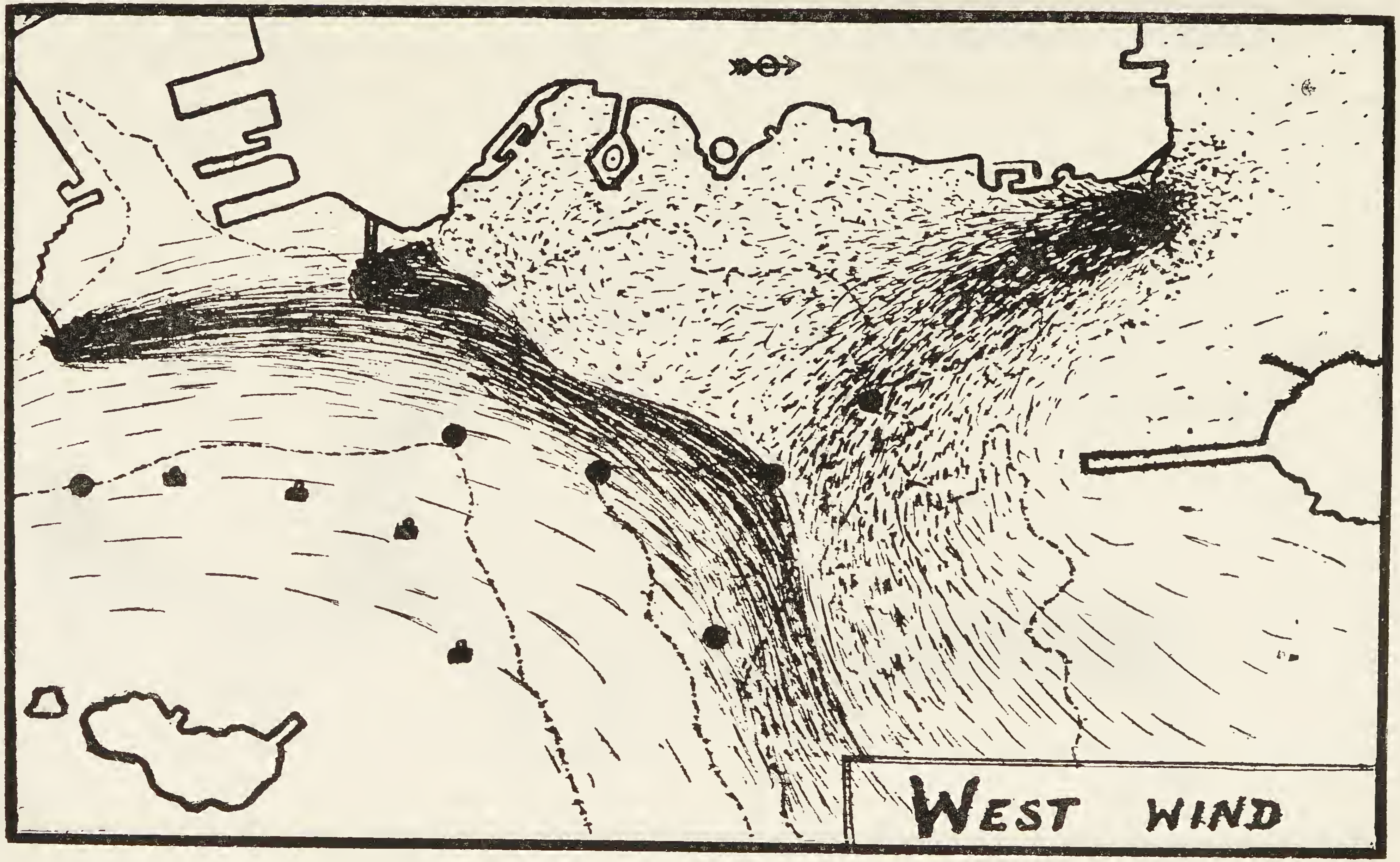


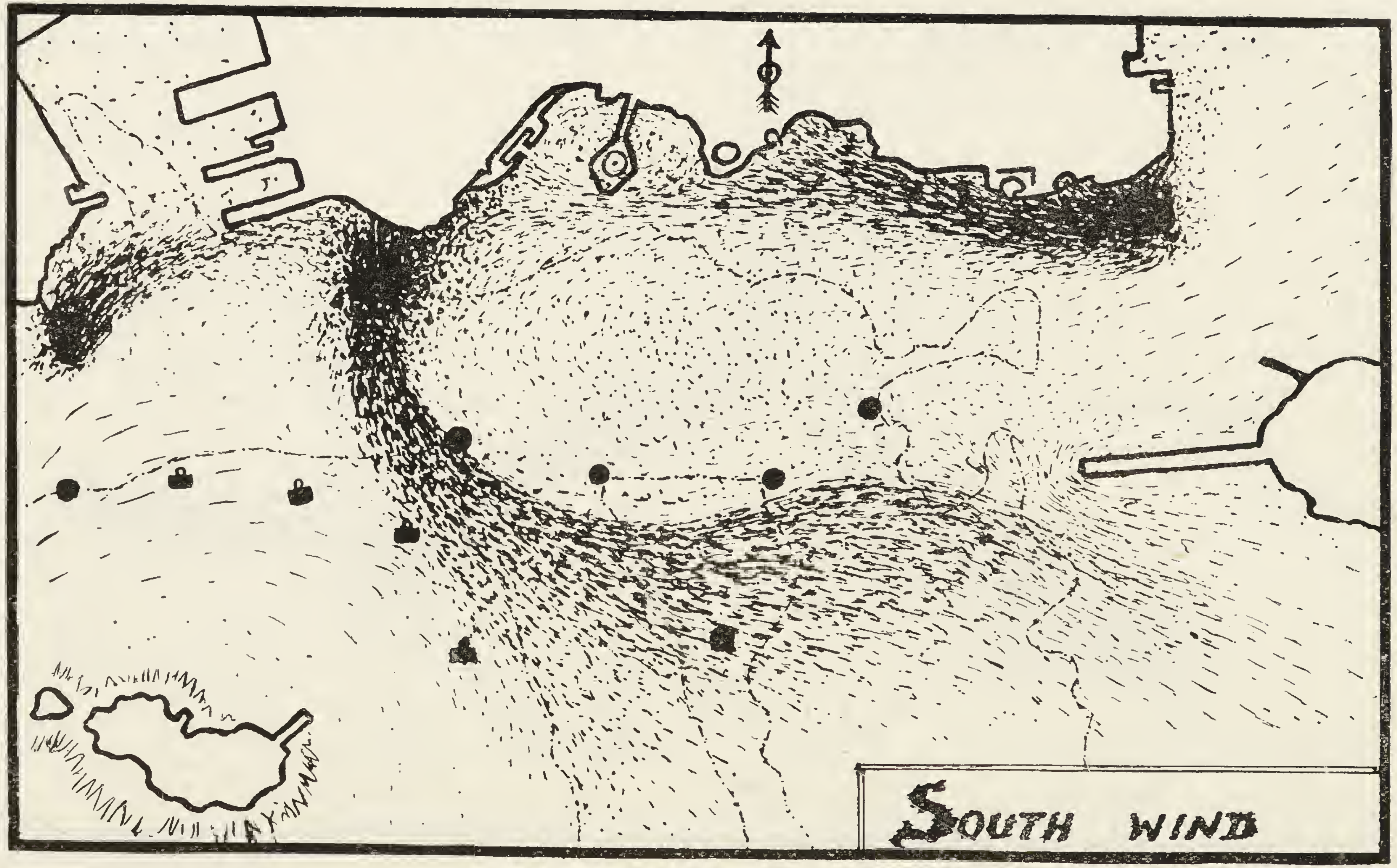
NORTH-WEST WIND


SOUTH-WEST GALE



SOUTH-EAST WIND


WEST WIND


SOUTH WIND

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A. Vital Statistics in Wards.

B. Infant Mortality, 1914–1927.

C. Birth-rate, Death-rate and Rate of Natural Increase, 1914–1927.

D. Deaths from Cancer, 1891–1927—variations from the average incidence.

E. Tuberculosis—Weekly numbers in Institutions.

F. Deaths from Tuberculosis, 1891–1927—variations from the average incidence.

G. Attendances at Tuberculosis Dispensaries, 1920–1927.

CHART A.

VITAL STATISTICS IN WARDS FOR 1927.

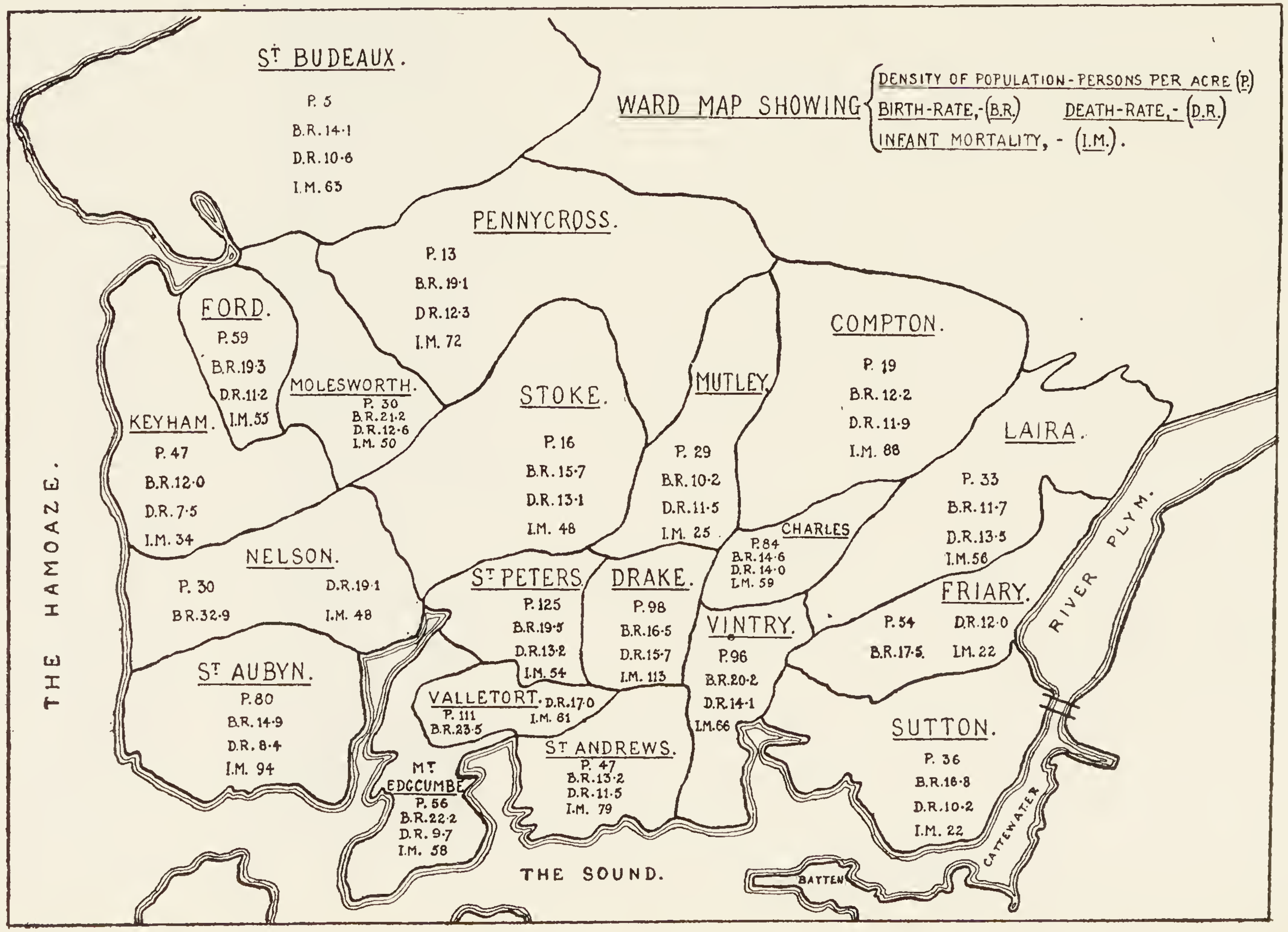
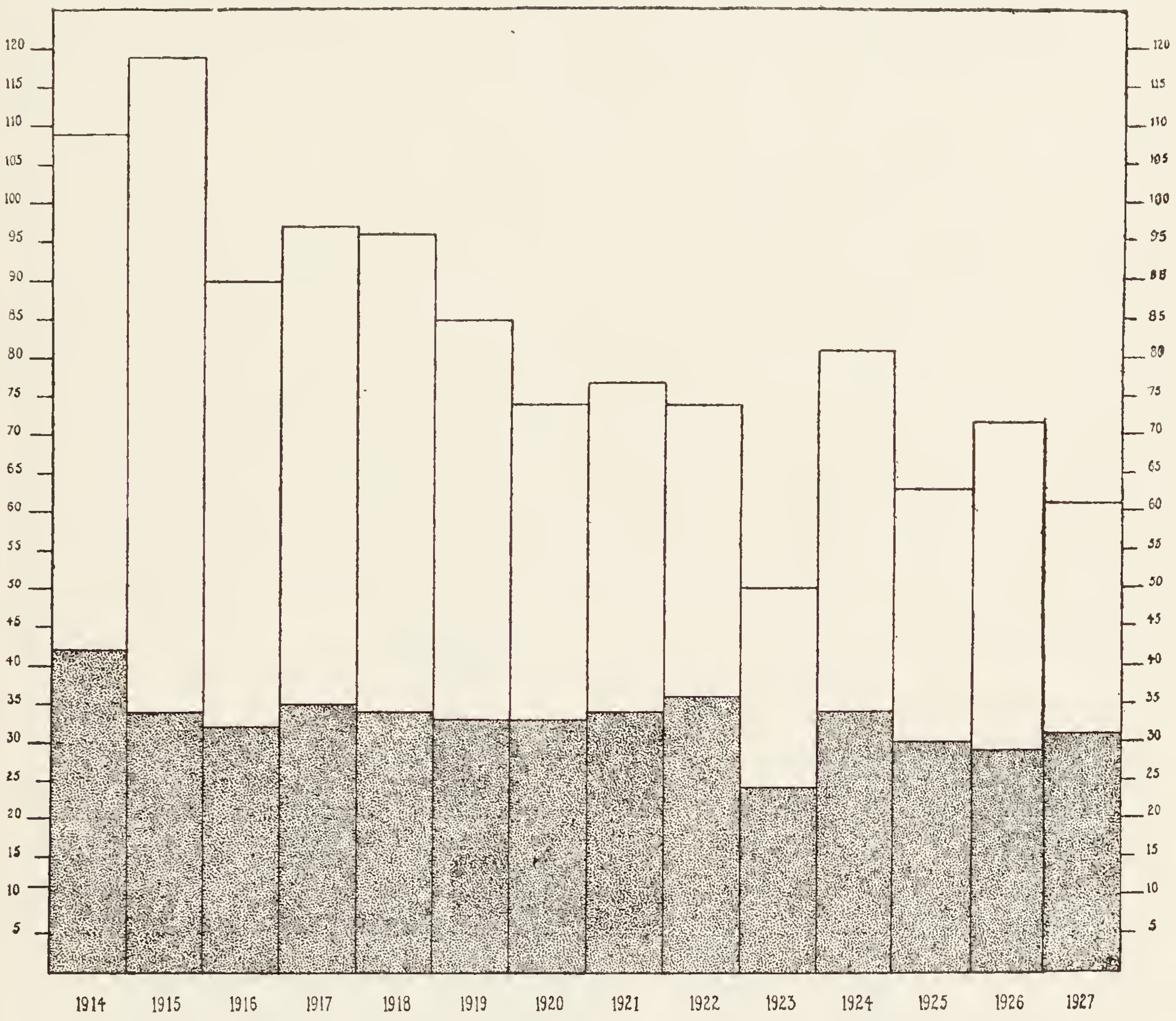

WARD MAP SHOWING
DENSITY OF POPULATION - PERSONS PER ACRE (P.)
BIRTH-RATE, - (B.R.) DEATH-RATE, - (D.R.)
INFANT MORTALITY, - (I.M.).
ST BUDEAUX. P. 5 B.R. 14·1 D.R. 10·6 I.M. 63
PENNYCROSS. P. 13 B.R. 19·1 D.R. 12·3 I.M. 72
FORD. P. 59 B.R. 19·3 D.R. 11·2 I.M. 55
MOLESWORTH. P. 30 B.R. 21·2 D.R. 12·6 I.M. 50
KEYHAM. P. 47 B.R. 12·0 D.R. 7·5 I.M. 34
STOKE. P. 16 B.R. 15·7 D.R. 13·1 I.M. 48
MUTLEY. P. 29 B.R. 10·2 D.R. 11·5 I.M. 25
COMPTON. P. 19 B.R. 12·2 D.R. 11·9 I.M. 88
LAIRA. P. 33 B.R. 11·7 D.R. 13·5 I.M. 56
CHARLES. P. 84 B.R. 14·6 D.R. 14·0 I.M. 59
NELSON. P. 30 B.R. 32·9 D.R. 19·1 I.M. 48
ST PETERS. P. 125 B.R. 19·5 D.R. 13·2 I.M. 54
DRAKE. P. 98 B.R. 16·5 D.R. 15·7 I.M. 113
VINTRY. P. 96 B.R. 20·2 D.R. 14·1 I.M. 66
FRIARY. P. 54 B.R. 17·5 D.R. 12·0 I.M. 22
ST AUBYN. P. 80 B.R. 14·9 D.R. 8·4 I.M. 94
VALLETORT. P. 111 B.R. 23·5 D.R. 17·0 I.M. 61
ST ANDREWS. P. 47 B.R. 13·2 D.R. 11·5 I.M. 79
MT EDGCUMBE. P. 56 B.R. 22·2 D.R. 9·7 I.M. 58
SUTTON. P. 36 B.R. 16·8 D.R. 10·2 I.M. 22
THE HAMOAZE.
RIVER PLYM.
CATTEWATER
BATTEN
THE SOUND.

CHART B.

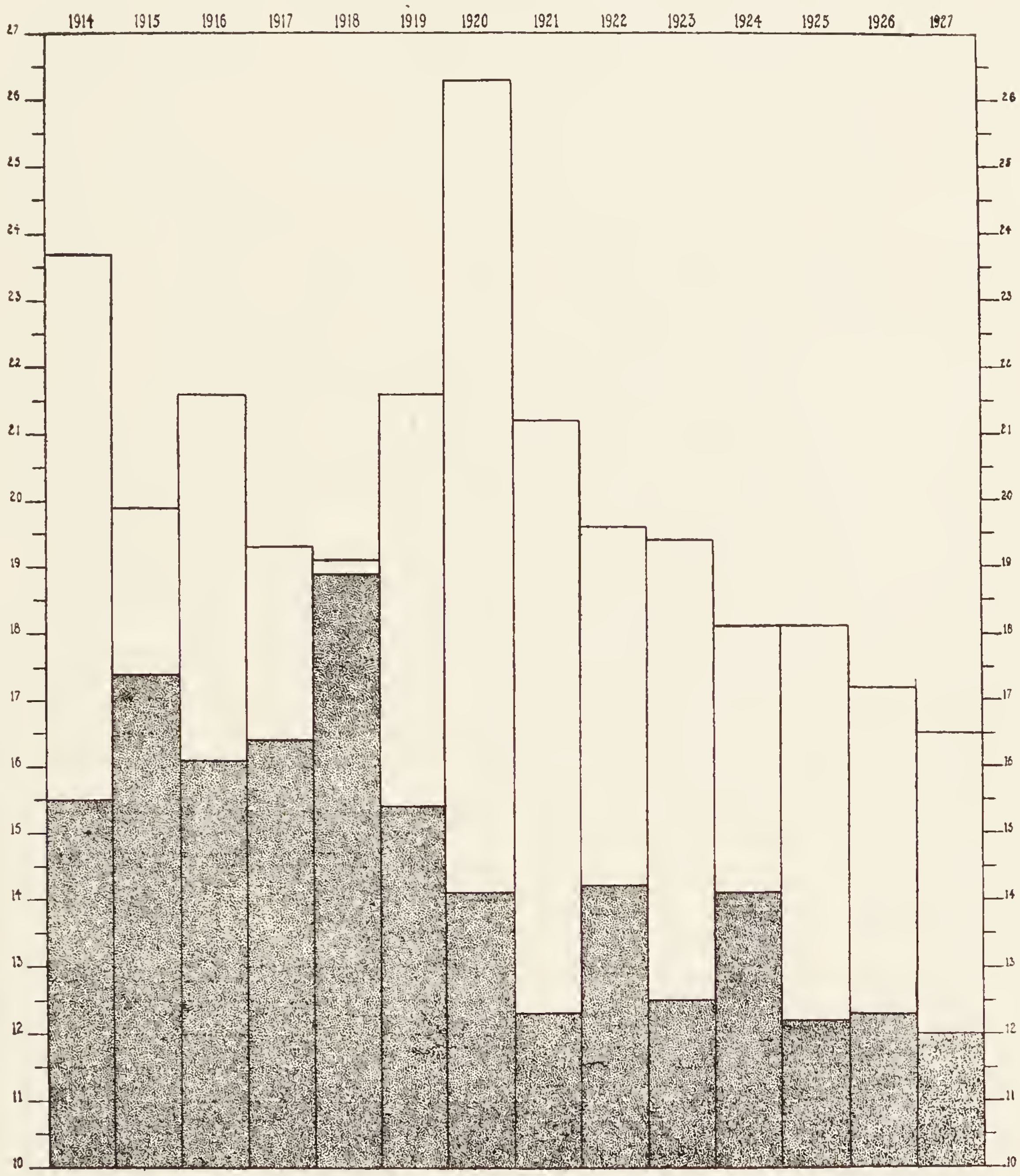
INFANT MORTALITY, 1914—1927.



NOTE : The shaded portion shows the number of Deaths due to ante-natal causes per 1,000 births ; and the unshaded portion shows the Deaths due to post-natal influences. The total column shows the rate of infant mortality year by year.

CHART C.

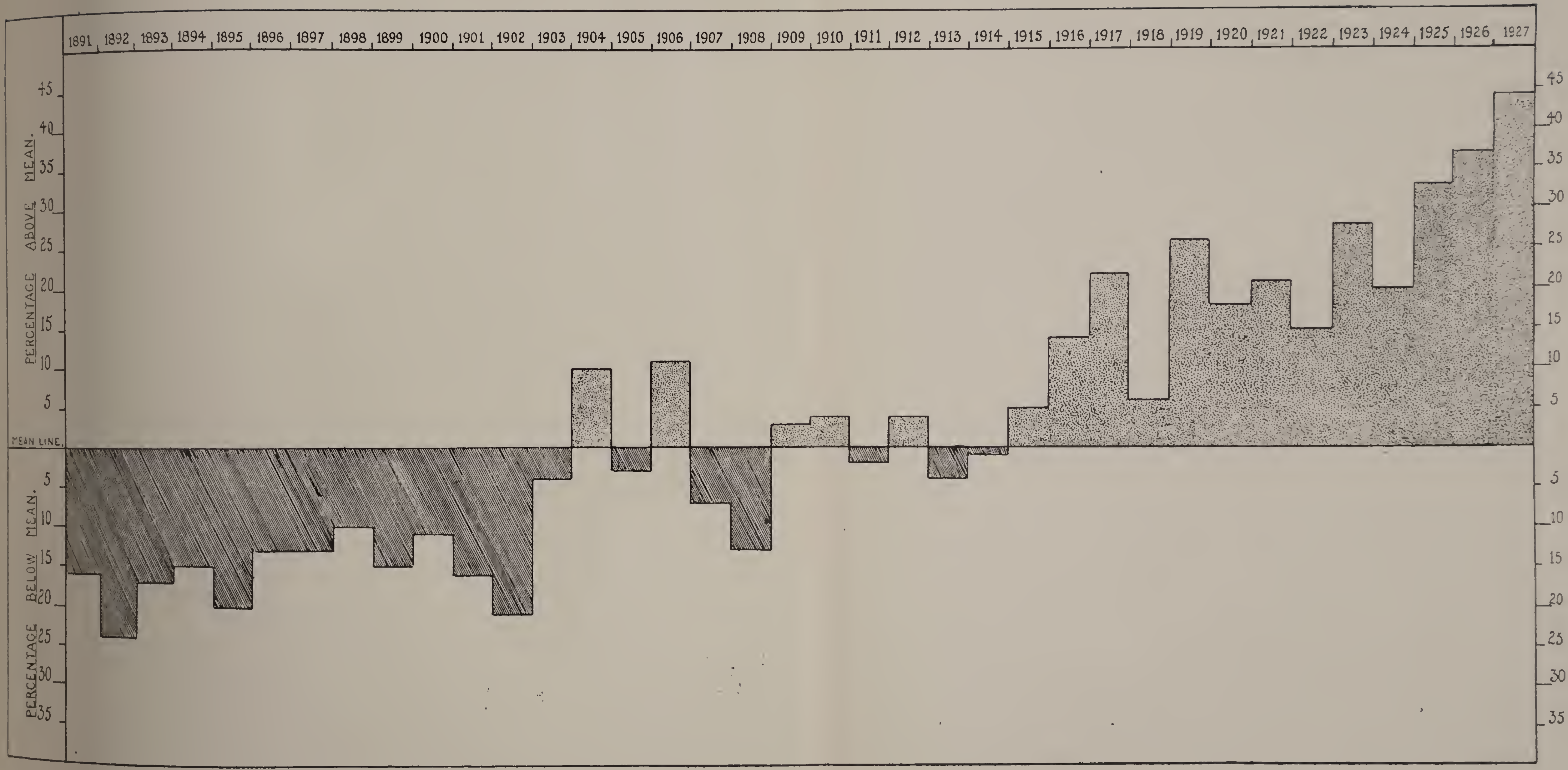
BIRTH-RATE, DEATH-RATE AND RATE OF NATURAL INCREASE, 1914—1927.



NOTE: The Death-rates are shown by the shaded portion of the chart; the rate of natural increase by the unshaded columns; and the Birth-rate by the shaded *plus* the unshaded portions.

CHART D.

DEATHS FROM CANCER, 1891—1927.



This Chart shows the variations from the average of Cancer Deaths.

The considerable percentage increase during recent years should be noted.

CHART E.

TUBERCULOSIS

Chart showing weekly numbers and the classifications of Tuberculous persons in Institutions during 1926–1927.

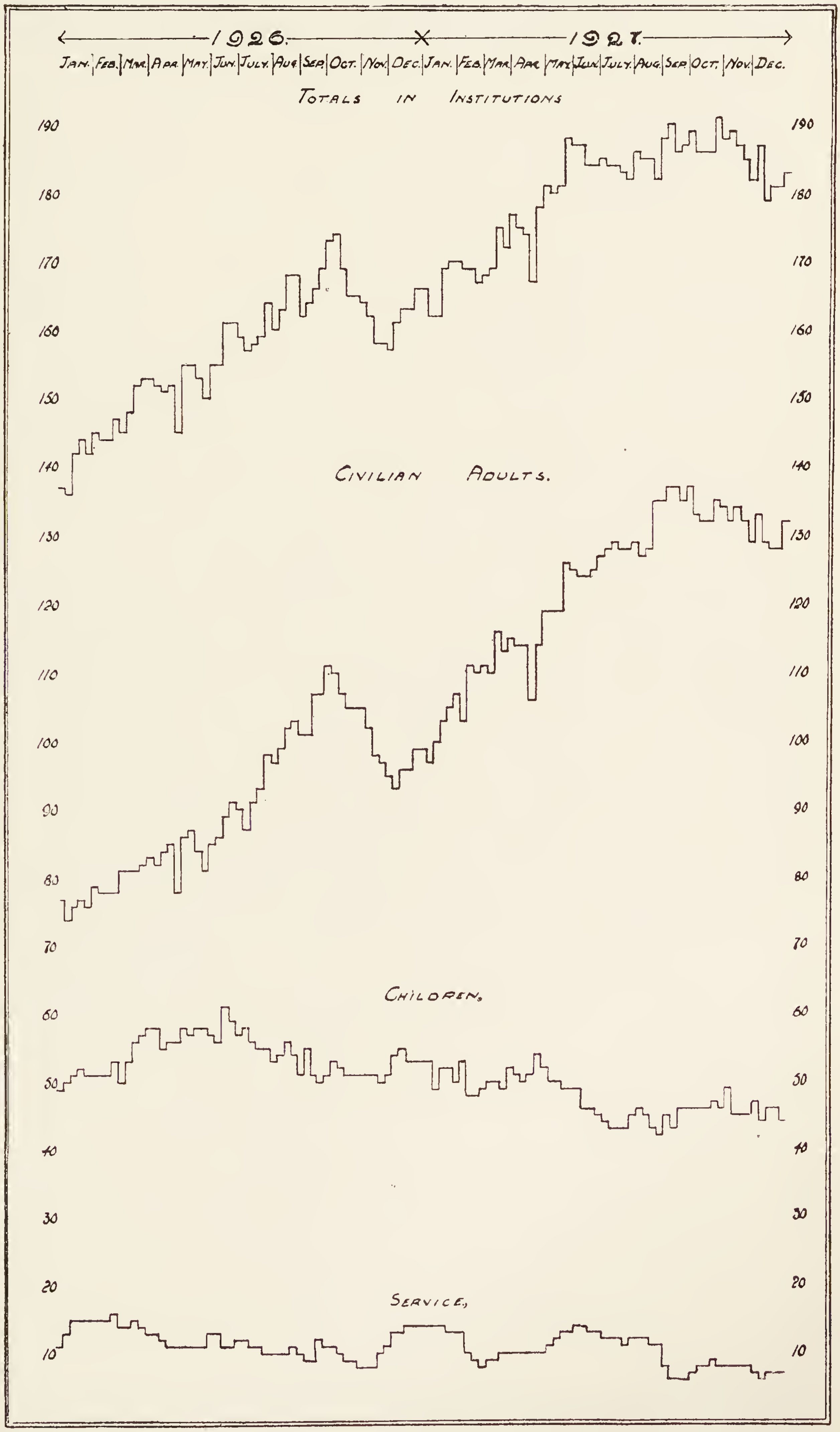
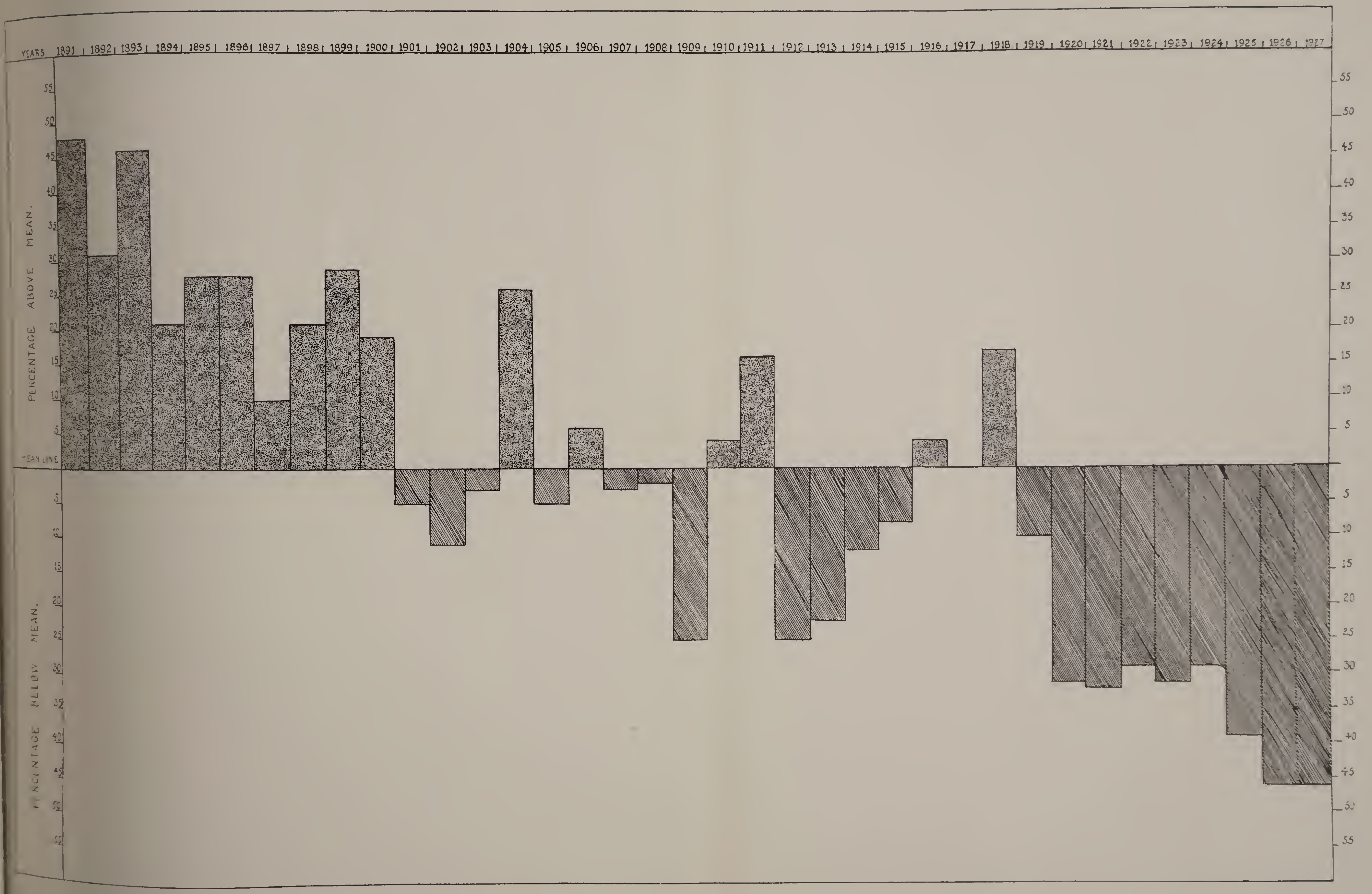


CHART F.

DEATHS FROM TUBERCULOSIS (All Forms) 1891—1927.



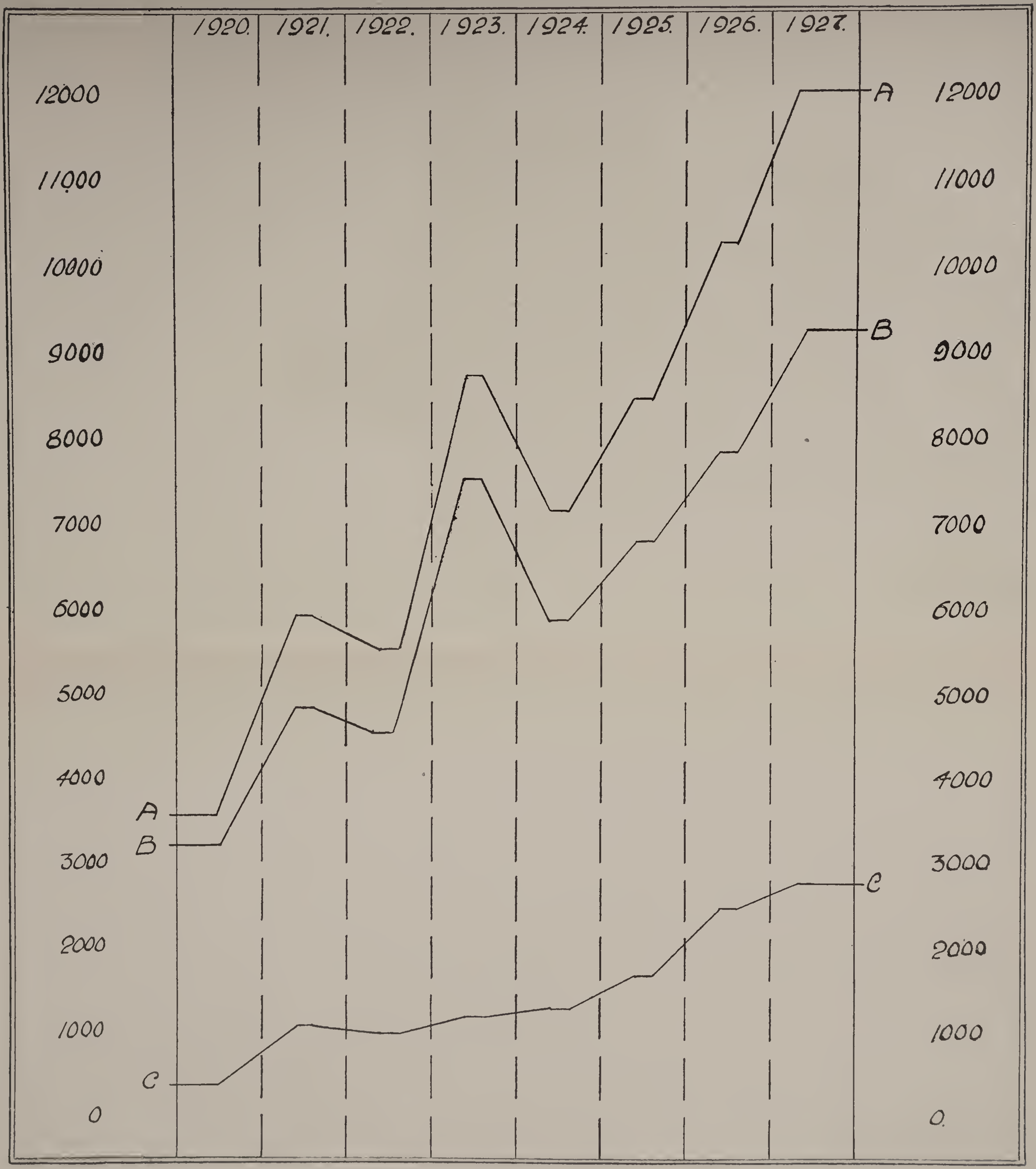
NOTE: This Chart shows the percentage variations of Tuberculosis Deaths from the average.

The very marked percentage reduction of deaths from Tuberculosis during recent years should be noted.

CHART G.

TUBERCULOSIS

Chart showing attendances at Dispensaries, No. of Notifications received and Deaths from Tuberculosis.



KEY:—

A—Total Attendances at Dispensaries.
B—Attendances at Beaumont House Main Dispensary.
C—Attendances at Royal Albert Hospital Sub-Dispensary.

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TABLE 1.

PLYMOUTH VITAL STATISTICS, 1914—1927.

Year.	*Estimated Mid-year population.*	*Birth-rate per 1,000 population.*	*Death-rate per 1,000 population.*	*Infant Mortality per 1,000 Births.*
1914 ..	212,421	23.7	15.5	109
1915 ..	187,911	19.9	17.4	119
1916 ..	184,473	21.6	16.1	90
1917 ..	179,375	19.3	16.4	96
1918 ..	179,629	19.1	18.9	96
1919 ..	181,967	21.6	15.4	85
1920 ..	189,218	26.3	14.1	74
1921 ..	199,860	21.2	12.3	77
1922 ..	200,370	19.6	14.2	74
1923 ..	211,500	19.4	12.5	50
1924 ..	206,600	18.1	14.1	81
1925 ..	211,078	18.1	12.1	63
1926 ..	211,350	17.2	12.3	71
1927 ..	**211,650**	**16.5**	**12.0**	**61**
107 Great Towns during 1927 ..		17.1	12.2	71
155 Smaller Towns during 1927 ..		16.4	11.3	68
England and Wales during 1927 ..		16.7	12.2	69

The Civilian population of the Borough of Plymouth, estimated by the Registrar General to the middle of 1926, is given as 187,600.

TABLE 2.

DEATHS FROM ALL CAUSES, 1927.

Causes of Death.	All Ages.	Under 1 year.	1—2 years.	2—3 years.	3—4 years.	4—5 years.	Total under 5 years.	5—10 years.	10—15 years.	15—25 years.	25—35 years.	35—45 years.	45—65 years.	65 and upwards.	Deaths in Public Instns	Inquests.	Compton.	Mutley.	Pennycross.	Laira.	Charles.	Friary.	Sutton.	Vintry.	Drake.	St.Andrew's	St. Peter's	Valletort.	Mount Edgcumbe.	Molesworth.	St. Budeaux	Ford.	Nelson.	Keyham.	St. Aubyn.	Stoke.	Totals.
1. Enteric fever	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1
2. Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
3. Measles	1	—	1	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
4. Scarlet fever	4	—	—	—	—	3	3	1	—	—	—	—	—	—	3	—	—	1	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1	1	—	4
5. Whooping Cough	13	6	1	2	2	1	12	—	—	—	—	—	1	—	1	—	1	—	—	1	—	—	—	—	—	—	1	3	—	—	1	—	1	—	3	2	13
6. Diphtheria	23	—	--	—	2	6	8	11	3	—	—	—	1	—	20	—	1	—	—	2	—	1	—	1	—	1	4	4	—	3	—	2	2	1	1	—	23
7. Influenza	24	—	—	—	—	—	—	2	—	1	1	1	10	9	2	—	1	—	1	1	2	1	1	1	2	—	3	—	—	—	3	2	2	4	—	—	24
8. Encephalitis lethargica	5	—	—	—	—	—	—	—	—	—	—	—	4	1	1	—	—	—	1	—	1	—	—	—	—	—	—	—	—	—	—	1	—	—	1	1	5
9. Meningococcal meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10. Tuberculosis of respiratory system	182	—	–	—	—	1	1	1	—	50	59	27	38	6	55	4	4	4	6	6	10	12	7	15	10	5	11	15	12	8	3	13	11	8	15	7	182
11. Other tuberculous diseases	31	2	1	3	3	1	10	3	3	6	3	1	5	—	22	—	1	—	1	2	1	2	1	2	1	3	1	1	4	—	2	5	2	1	1	—	31
12. Cancer, malignant disease	334	—	—	—	—	—	—	—	1	1	7	17	154	154	72	3	12	15	17	19	19	12	20	21	17	11	26	22	13	16	13	9	19	21	17	15	334
13. Rheumatic fever	11	—	—	—	—	—	—	2	1	6	—	—	1	1	3	—	—	—	1	2	—	1	—	2	—	—	—	2	—	1	—	1	—	—	—	1	11
14. Diabetes	25	—	—	—	—	—	—	—	—	—	4	—	14	7	4	—	1	—	2	6	—	1	2	1	—	1	1	3	—	1	—	—	1	3	—	2	25
15. Cerebral hæmorrhage	185	—	—	—	—	—	—	—	—	—	2	2	52	129	34	3	6	7	10	13	7	7	9	6	11	9	10	10	8	7	3	7	13	13	19	10	135
16. Heart disease	304	—	—	—	—	—	—	—	1	4	8	13	100	178	44	37	13	14	17	12	19	16	12	18	22	8	24	15	7	24	2	13	23	17	19	9	304
17. Arterio-sclerosis	87	—	—	—	—	—	—	—	—	1	1	1	15	69	20	10	5	4	1	9	4	4	—	4	9	6	6	2	1	5	3	3	11	1	4	5	87
18. Bronchitis	320	18	3	2	—	—	23	3	—	1	2	10	58	223	56	4	4	9	6	19	27	24	15	23	26	11	22	25	18	9	6	6	15	16	34	5	320
19. Pneumonia (all forms)	176	32	20	5	2	2	61	4	3	8	6	14	43	37	39	19	9	5	3	4	14	8	8	22	13	7	8	12	5	6	3	11	10	8	13	7	176
20. Other respiratory diseases	24	—	—	—	—	—	—	—	1	1	—	3	12	7	5	2	1	2	1	2	1	1	1	1	1	1	2	4	1	1	—	1	—	1	1	1	24
21. Ulcer of stomach or duodenum	22	—	—	—	—	—	—	—	—	—	2	6	10	4	8	2	1	1	—	—	1	2	1	3	2	—	1	2	2	2	—	1	3	—	—	—	22
22. Diarrhœa, etc. (under 2 years)	16	12	4	—	—	—	16	—	—	—	—	—	—	--	1	1	—	—	—	—	—	—	1	3	2	1	—	—	1	1	—	—	2	2	2	1	16
23. Appendicitis and typhlitis	10	—	—	1	—	—	1	1	—	1	1	3	3	—	8	—	—	1	1	—	2	2	—	—	1	1	—	—	—	—	—	—	1	1	—	—	10
24. Cirrhosis of liver	13	—	—	—	—	—	—	—	—	—	—	2	7	4	3	1	—	1	—	—	2	—	1	—	—	1	1	—	2	—	1	—	1	—	2	1	13
25. Acute and chronic nephritis	68	1	—	—	—	—	1	—	2	5	2	4	33	21	19	3	2	4	2	3	5	4	2	6	4	3	6	4	2	4	1	—	—	5	7	4	68
26. Puerperal sepsis	11	—	—	—	—	—	—	—	—	1	7	3	—	—	7	—	—	—	1	—	—	2	—	1	2	—	1	1	—	—	2	—	—	—	—	1	11
27. Other accidents and diseases of pregnancy and parturition	16	—	—	—	—	—	—	—	—	6	6	4	—	—	5	—	1	—	—	—	1	1	2	2	1	—	2	2	1	1	—	1	—	—	—	1	16
28. Congenital debility and malformation, prematurity	107	105	2	—	—	—	107	—	—	—	—	—	—	—	—	—	3	2	7	5	3	2	1	5	10	6	8	7	6	5	4	4	6	3	16	4	107
29. Suicide	26	—	—	—	—	—	—	—	—	4	2	3	15	2	9	26	—	—	1	3	4	1	1	3	3	1	—	2	—	2	1	1	1	1	—	1	26
30. Other violent deaths	65	1	1	—	—	3	5	1	—	7	5	7	16	24	36	63	3	—	5	6	1	3	5	6	3	3	5	6	2	5	2	2	2	1	4	1	65
31. Other defined diseases	441	35	6	6	2	—	49	11	5	10	15	16	93	242	153	17	19	20	15	29	38	18	22	35	36	20	31	24	13	17	9	20	19	20	21	15	441
32. Causes ill-defined or unknown	2	2	—	—	—	—	2	—	—	—	—	—	—	—	—	2	—	—	—	1	---	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	2
Totals	2,547	214	39	19	11	17	300	40	20	113	133	137	686	1,118	631	197	88	90	99	145	162	125	112	181	176	99	175	166	98	118	59	104	146	129	181	94	2,547

TABLE 3. INFANT MORTALITY.

Net deaths from stated causes under 1 year of age during 1927.

Causes of Death.	Under 1 week.	1—2 weeks.	2—3 weeks.	3—4 weeks.	Total under 1 month	1—3 months.	3—6 months.	6—9 months.	9—12 months.	Total under 1 year.	Compton.	Mutley.	Penny-cross.	Laira.	Charles.	Friary.	Sutton.	Vintry.	Drake.	St. Andrew's	St. Peter's	Valletort.	Mount Edg-cumbe.	Moles-worth.	St. Budeaux.	Ford.	Nelson.	Keyham.	St. Aubyn.	Stoke.	Total.
Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Scarlet Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough	—	—	—	—	—	2	—	1	3	6	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	2	1	6
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculous Meningitis	—	—	—	—	—	—	—	2	—	2	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	2
Abdominal Tuberculosis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Other Tuberculous Diseases ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Convulsions	—	1	—	1	2	1	—	—	—	3	—	—	—	—	1	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	3
Laryngitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Bronchitis	—	1	1	—	2	3	5	6	2	18	—	—	—	—	1	1	2	—	2	1	1	1	2	2	—	—	—	1	4	—	18
Pneumonia (all forms)	2	—	—	—	2	1	7	12	10	32	2	—	2	—	3	1	—	7	2	1	4	2	2	—	—	2	1	—	3	—	32
Diarrhœa	—	—	1	—	1	—	—	—	—	1	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1
Enteritis	—	—	1	—	1	6	2	2	—	11	—	—	—	—	—	—	1	1	1	1	—	—	1	1	—	—	2	2	1	—	11
Syphilis	—	—	1	—	1	2	1	2	—	6	1	—	—	—	—	—	—	1	1	—	—	1	—	—	—	1	—	—	1	—	6
Rickets	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Suffocation, overlying	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Injury at Birth	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Atelectasis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Congenital malformations.. ..	6	—	—	—	6	—	1	—	—	7	1	1	—	1	—	—	—	—	1	—	—	—	—	—	—	—	1	—	1	1	7
Premature birth	43	4	1	3	51	8	1	—	—	60	1	—	5	2	1	1	—	4	7	2	3	4	5	3	2	2	4	2	9	3	60
Atrophy, Debility and Marasmus	21	3	4	2	30	6	1	1	—	38	1	1	2	2	2	1	1	1	2	4	3	4	1	2	2	2	1	1	5	—	38
Other Causes	9	4	1	2	16	6	4	3	1	30	—	—	2	2	2	—	—	2	5	—	2	2	2	1	—	2	2	1	5	—	30
Total	81	13	10	8	112	35	22	29	16	214	8	2	11	7	10	4	4	17	21	9	14	14	13	10	5	10	12	7	31	5	214

TABLE 4. **INFECTIOUS DISEASES, 1927. WARD DISTRIBUTION.**

Disease.	Compton.	Mutley.	Pennycross.	Laira.	Charles.	Friary.	Sutton.	Vintry.	Drake.	St. Andrew's	St. Peter's	Valletort.	Mount Edgcumbe.	Molesworth.	St. Budeaux.	Ford.	Nelson.	Keyham.	St. Aubyn.	Stoke.	Totals.	Total Number of Cases Notified.				Cases removed to—		Cases re-diagnosed.	Cases in Other Institutions.	Cases isolated at home.	Cases admitted from outside the Borough.		Port Case.
																						1st Qr.	2nd Qr.	3rd Qr.	4th Qr.	Mount Gold.	Swilly.				Mount Gold.	Swilly.	
Scarlet Fever	11	8	15	27	24	20	17	12	13	7	10	6	15	11	10	17	24	7	51	20	325	150	91	45	39	199	74	7	2	50	4	1 (Mil)	—
Diphtheria	6	5	8	20	33	36	50	29	17	11	31	19	16	11	3	14	12	12	29	10	372	105	82	72	113	356	1	93	1	14	17	—	—
Enteric	—	—	—	—	3	—	1	1	—	—	1	—	—	1	—	1	—	1	—	1	10	—	5	2	3	8	—	1	—	2	1	—	—
Pneumonia	4	2	5	3	14	5	2	10	4	2	5	5	3	6	—	3	12	8	11	8	112	39	23	11	39	—	—	—	15	97	—	—	—
Puerperal Fever	1	1	—	—	4	2	—	2	—	—	—	—	—	1	1	1	1	—	4	3	21	8	3	5	5	—	—	—	14	7	—	—	—
Puerperal Pyrexia	—	1	—	—	8	1	4	1	3	1	1	2	7	—	2	2	6	2	—	3	43	17	3	9	14	—	—	—	26	17	—	—	—
Cerebro-Spinal Fever	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	2	1	1	—	—	1	—	—	—	1	—	—	—
Acute Poliomyelitis	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	1	—	3	1	—	—	2	—	—	—	3	—	—	—	—
Encephalitis Lethargica	—	—	1	1	2	—	—	—	—	—	—	—	—	1	—	1	—	1	1	1	9	3	3	2	1	—	—	—	4	5	—	—	—
Ophthalmia Neonatorum	—	1	—	—	4	—	1	—	3	—	—	3	4	3	—	—	3	—	7	—	29	12	4	8	5	—	—	—	12†	17	—	—	—
Erysipelas	—	2	2	1	2	4	2	7	5	1	4	7	7	4	1	3	5	2	10	5	74	31	14	17	12	—	1	—	11	62	—	—	—
Tuberculosis—Pulmonary	4	12	29	20	22	13	15	28	30	15	20	30	18	12	8	15	14	17	27	9	358	111	84	73	90	—	—	—	—	—	—	—	—
Non-Pulmonary	3	4	8	9	5	3	5	10	9	5	6	12	5	3	2	5	10	2	9	—	115	33	33	23	26	—	—	—	—	—	—	—	—
Malaria—Contracted Abroad	1	1	—	—	—	—	—	—	—	—	1	—	2	—	—	—	—	1	—	—	6	—	4	2	—	—	—	—	—	—	—	—	—
Chicken-pox	31	50	67	54	53	60	75	107	60	32	67	39	24	60	5	44	68	66	98	23	1083	209	270	193	411	—	—	—	2	1081	—	—	1
*Infective Enteritis	—	—	1	—	1	—	—	3	1	—	2	—	—	1	—	2	1	—	1	—	13	—	—	11	2	—	3	—	2	8	—	—	—
Totals	61	87	137	135	175	144	172	211	145	74	147	123	101	114	32	108	158	119	249	83	2575	720	620	473	762	564	79	101	92	1361	22	1	1
Attack rate per 10,000 population	82.7	111.7	171.2	126.1	150.7	136.4	157.6	165.2	129.9	86.5	111.1	126.3	100.0	121.7	57.2	116.3	206.4	69.7	115.6	116.2	121.7												

* INFECTIVE ENTERITIS (under 2 years of age) became notifiable for twelve months from July 1st, 1927.

DIPHTHERIA: There have been 1311 contacts swabbed, of which number 33 were found "Positive Carriers."
21 were isolated at Mount Gold Hospital, 4 at Swilly, and 8 at home.
There were 9 "Return Cases" and 3 Cross Infected Cases from Scarlet Fever discharges.
These were all admitted to Hospital.

SCARLET FEVER: There were 13 "Return Cases" admitted to Hospital and 1 home-treated "Return" case; and 5 were readmitted to Hospital; also 2 Cross Infected cases from Diphtheria discharges.

TUBERCULOSIS: Since 25th April, 37 cases of Pulmonary Tuberculosis (Females) have been admitted to Swilly.

† 4 Out-patients; 8 In-patients.

TABLE 8.

MATERNITY AND CHILD WELFARE WORK DONE DURING THE YEAR 1927.

Nature of Work.	*Town Hall, Stonehouse.*	*Beaumont Hut.*	*St. Aubyn Street.*	*Albert Road.*	*Wolseley Hall.*	*Totals.*
Number of Sessions held	150	138	50	50	50	438
Number of Ante-natal Sessions held ..	51	40	51	23	51	216
Number of Mothers seen by Doctor—Ante-natal, 1st visit ..	280	96	83	31	41	531
Total	674	317	205	56	126	1,378
Post-natal	604	342	151	137	211	1,445
Number of Babies entered on Register during year	1,365	906	425	389	380	3,465
Number of Babies seen by Doctor ..	4,490	2,760	1,121	1,035	1,146	10,552
Number of Babies weighed	10,115	9,301	3,251	2,396	2,828	27,891
Children Normal—general advice given	884	342	185	192	199	1,802
Suffering from incorrect feeding ..	93	88	12	37	24	254
Difficult Nutrition	37	60	17	10	12	136
Suffering from Rickets	90	71	43	8	17	229
Suffering from Wasting	2	9	5	1	3	20
Suffering from other Diseases ..	161	262	126	112	97	758
Referred to own private doctors ..	20	20	13	13	12	78
Referred to Hospitals	78	54	24	16	16	188
Treated by Ultra-violet Rays—Sessions held	199	—	—	—	—	199
1st Attendances	130	—	—	—	—	130
Re-attendances	2,426	—	—	—	—	2,426
Health Talks given by Nurses ..	29	—	—	—	—	29
Sewing parties held	100	63	—	—	—	163
Mothers attending Sewing Classes ..	1.202	538	—	—	—	1,740

Nature of Work.	*Town Hall, Stonehouse.*		*Beaumont Hut.*		*St. Aubyn Street.*		*Albert Road.*		*Wolseley Hall.*		*Totals.*	
	First visits.	*Total visits.*	*First visits.*	*Total visits.*	*First visits.*	*Total visits.*	*First visits.*	*Total visits.*	*First visits.*	*Total visits.*	*First visits.*	*Total visits.*
Visits paid by Nurses to expectant Mothers	1,434	2 ,557	100	152	41	41	30	122	61	86	1,666	2,958
Visits to Infants under one year ..	957	4,111	796	3,102	368	1,735	600	2,426	579	2,126	3,300	13,500
Visits to Children aged 1–5 years ..	48	5,745	43	6,563	10	1,004	65	3,886	91	4,014	257	21,212
Miscellaneous	—	348	—	340	—	90	—	137	—	172	—	1,087
Total Visits paid by Nurses	—	12,761	—	10,157	—	2,870	—	6,571	—	6,398	—	38,757

NOTE.—In addition to the above, the following services were provided during the year :—

Total amount of Ambrosia, Virol and Milk sold	3,671 lbs.	Distributed free	11,536 lbs.
,, ,, Virol ,,	609 lbs.	,, ,,	2,246 lbs.
,, ,, Cows' milk		,, ,,	5,071¾ gals.
Dressings supplied			533
Medicines supplied			3,240
Lotions, Tablets, Ointments, Powder, Vaseline			2,890
Maternity Bags lent			29

TABLE 6.

SUPERVISION OF MIDWIVES.

Supervision of Midwives—	
Number of Midwives on Register	94
,, ,, in Private Practice	40
,, ,, attached to Nursing Homes ..	54
Number of visits of inspection made	131
Number of Medical Help by Midwives	727
Breaches of rules of the Central Midwives Board.	
1. Lack of cleanliness in bags and appliances ..	3
2. Appliances broken or unfit for use	—
3. Lack of cleanliness in home	2
4. Failure to keep Temperature records correctly ..	5
5. Failure to notify cases of discharging eyes ..	15
6. Failure to notify that Medical assistance was obtained	8
7. Failure to notify that artificial feeding was advised	10

TABLE 7.

OPHTHALMIA NEONATORUM, 1927.

No. Notified.	*Treated*			*Vision un-impaired.*	*Vision im-paired.*	*Total blind-ness.*	*Deaths.*
	Home.	*In Hospital*					
		In-patients	*Out-patients*				
29	17	8	4	25	2	—	2

Deaths occurred from—

(1) Nasal Inflammation of Nasal Passage and Exhaustion.

(2) Marasmus and prematurity.

TABLE 9.

SHOWING THE AGE AND SEX OF DEATHS AND NEW CASES OF TUBERCULOSIS—1927.

Age Periods.	*New cases.*				*Deaths.*			
	Pulmonary.		*Non-pulmonary.*		*Pulmonary.*		*Non-pulmonary.*	
	M.	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
0 to 1 year	—	—	—	2	—	—	1	1
1 ,, 5 years	1	6	10	7	1	—	4	4
5 ,, 10 ,,	25	15	6	5	1	—	1	2
10 ,, 15 ,,	16	11	7	6	—	—	2	1
15 ,, 20 ,,	25	15	9	8	15	14	—	2
20 ,, 25 ,,	24	24	9	13	10	10	3	1
25 ,, 35 ,,	41	43	8	6	32	28	1	2
35 ,, 45 ,,	19	25	4	2	20	7	1	—
45 ,, 55 ,,	29	12	3	3	15	6	3	—
55 ,, 65 ,,	8	7	4	1	10	7	1	1
65 and upwards	5	7	1	1	2	4	—	—
TOTALS ..	193	165	61	54	106	76	17	14

TABLE 10.

RETURN SHOWING THE WORK OF THE TUBERCULOSIS DISPENSARIES DURING THE YEAR 1927.

Diagnosis.	*Pulmonary.*				*Non-Pulmonary.*				*Total.*			
	Adults.		*Children.*		*Adults.*		*Children.*		*Adults.*		*Children.*	
	M.	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*	*M.*	*F.*
A.—NEW CASES examined during the year (excluding contacts) :—												
(*a*) Definitely tuberculous	97	77	27	28	11	13	18	4	108	90	45	32
(*b*) Doubtfully tuberculous.. ..	—	—	—	—	—	—	—	—	22	27	26	29
(*c*) Non-tuberculous	—	—	—	—	—	—	—	—	31	26	37	33
B.—CONTACTS examined during the year												
(*a*) Definitely tuberculous	2	4	11	9	—	—	3	1	2	4	14	10
(*b*) Doubtfully tuberculous ..	—	—	—	—	—	—	—	—	7	9	17	14
(*c*) Non-tuberculous	—	—	—	—	—	—	—	—	75	102	305	320
C.—CASES written off the Dispensary Register as												
(*a*) Cured	—	—	—	—	—	—	—	—	—	—	—	—
(*b*) Diagnosis not confirmed or non-tuberculous (including cancellation of cases notified in error) ..	—	—	—	—	—	—	—	—	119	183	363	381
D.—NUMBER OF PERSONS on Dispensary Register on December 31st :—												
(*a*) Diagnosis completed	388	280	116	112	50	50	79	43	438	330	195	155
(*b*) Diagnosis not completed ..	—	—	—	—	—	—	—	—	5	5	17	8

1. Number of persons on Dispensary Register on January 1st	1,057
2. Number of patients transferred from other areas and of " lost sight of " cases returned	49
3. Number of patients transferred to other areas and cases " lost sight of "	145
4. Died during the year	147
5. Number of observation cases under A (*b*) and B (*b*) above in which period of observation exceeded 2 months	13
6. Number of attendances at the Dispensary (including Contacts) ..	12,003
7. Number of attendances of non-pulmonary cases at Orthopædic out-stations for treatment or supervision	—
8. Number of attendances, at General Hospitals or other Institutions approved for the purpose, of patients for	
(*a*) " Light " treatment	—
(*b*) Other special forms of treatment	—

9. Number of patients to whom Dental Treatment was given, at or in connection with the Dispensary	87
10. Number of consultations with medical practitioners :—	
(*a*) At Homes of Applicants ..	52
(*b*) Otherwise	505
11. Number of other visits by Tuberculosis Officers to Homes ..	492
12. Number of visits by Nurses or Health Visitors to Homes for Dispensary purposes	11,772
13. Number of	
(*a*) Specimens of sputum, &c., examined	1,607
(*b*) X-ray examinations made in connection with Dispensary work	230
14. Number of Insured Persons on Dispensary Register on the 31st December	527
15. Number of Insured Persons under Domiciliary Treatment on the 31st December	85
16. Number of reports received during the year in respect of Insured Persons :—	
(*a*) Form G.P. 17	330
(*b*) Form G.P. 36	72

TABLE 11.

(A) Average Number of Beds available for Patients in Plymouth Institutions during the Year 1927.

	Observation.	*Pulmonary Tuberculosis*		*Non-Pulmonary Tuberculosis.*		*Total.*
		" Sanatorium " Beds.	*" Hospital " Beds.*	*Disease of Bones and Joints*	*Other Conditions.*	
Adult Males	1	37	45	3	1	87
Adult Females	1	25	15	5	1	47
Children under 15	3	30	—	11	7	51
TOTAL	5	92	60	19	9	185

(B) Return showing the Extent of Residential Treatment during the Year 1927.

			In Institutions on Jan. 1.	*Admitted during the year.*	*Discharged during the year.*	*Died in the Institutions.*	*In Institutions on Dec. 31*
Number of Patients ..	Adults	*M.*	75	180	148	31	76
		F.	34	113	78	13	56
	Children	*M.*	36	47	51	2	30
		F.	17	33	35	1	14
Number of Observation Cases	Adults	*M.*	—	2	2	—	—
		F.	—	1	—	—	1
	Children	*M.*	—	—	—	—	—
		F.	—	2	2	—	—
	Total ..		162	378	316	47	177

TABLE 12.

RETURN SHOWING THE IMMEDIATE RESULTS OF TREATMENT OF PATIENTS AND OF OBSERVATION OF DOUBTFUL CASES DISCHARGED FROM RESIDENTIAL INSTITUTIONS DURING THE YEAR 1927.

Classification on admission to the Institution.		*Condition at time of discharge.*	*Duration of Residential Treatment in the Institution.*												*Total.*
			Under 3 months.			*3–6 months.*			*6–12 months.*			*More than 12 months.*			
			M.	*F.*	*Ch.*	*M.*	*F.*	*Ch.*	*M.*	*F.*	*Ch.*	*M.*	*F.*	*Ch.*	
Pulmonary Tuberculosis.	*Class T.B. minus.*	Quiescent	1	1	1	3	3	9	3	3	11	—	—	3	38
		Improved	10	9	13	8	11	10	13	5	9	2	—	5	95
		No material improvement ..	6	3	1	3	—	—	1	—	1	—	—	—	15
		Died in Institution	6	2	—	3	2	—	1	—	—	—	—	—	14
	Class T.B. plus. Group 1.	Quiescent	1	1	1	1	2	1	1	—		1	—	—	9
		Improved	3	1	—	3	3	1	1	1	—	1	—	—	14
		No material improvement ..	1	—	—	1	—	—	—	—	—	—	—	—	2
		Died in Institution	1	—	—	1	—	—	—	—	—	—	—	—	2
	Class T.B. plus. Group 2.	Quiescent	1	—	—	1	2	—	4	—	—	2	—	—	10
		Improved	6	4	—	22	3	—	10	5	1	2	1	—	54
		No material improvement ..	2	6	—	4	1	—	2	—	—	—	—	—	15
		Died in Institution	3	3	—	5	2	—	2	—	—	—	—	—	15
	Class T.B. plus. Group 3.	Quiescent	—	—	—	—	—	—	—	—	—	—	—	—	—
		Improved	1	—	1	5	—	—	3	3	—	1	2	—	16
		No material improvement ..	3	1	—	—	3	—	2	—	—	—	—	—	9
		Died in Institution	2	2	—	1	1	—	2	—	—	—	—	—	8
Non-Pulmonary Tuberculosis.	*Bones and Joints.*	Quiescent or Arrested ..	1	1	4	1	—	2	4	1	3	1	—	4	22
		Improved	1	—	—	—	1	—	1	—	—	—	—	—	3
		No material improvement ..	—	—	—	—	—	—	—	—	1	—	—	—	1
		Died in Institution	1	—	1	—	—	—	—	—	1	1	—	—	4
	Abdominal.	Quiescent or Arrested ..	—	—	—	—	—	—	—	—	—	—	—	—	—
		Improved	—	—	—	—	—	—	—	—	—	—	—	—	—
		No material improvement ..	—	—	1	—	—	—	—	—	—	—	—	—	1
		Died in Institution	—	1	1	—	—	—	—	—	—	—	—	—	2
	Other Organs.	Quiescent or Arrested ..	—	—	—	1	—	—	—	—	—	—	—	—	1
		Improved	2	—	1	—	—	—	—	—	—	—	—	—	3
		No material improvement ..	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution	2	—	—	—	—	—	—	—	—	—	—	—	2
	Peripheral Glands.	Quiescent or Arrested ..	—	—	—	—	1	—	—	—	—	—	—	—	1
		Improved	1	—	2	—	—	—	—	—	—	—	—	—	3
		No material improvement ..	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution	—	—	—	—	—	—	—	—	—	—	—	—	—
			Under 1 week.			*1–2 weeks.*			*2–4 weeks.*			*More than 4 weeks.*			
Observation for purpose of diagnosis.		Tuberculous	—	—	—	—	—	—	—	—	—	—	—	—	—
		Non-tuberculous	—	—	—	—	—	—	—	1	—	1	—	1	3
		Doubtful	—	—	—	—	—	—	—	—	1	—	—	—	1

TABLE 12A.

PULMONARY TUBERCULOSIS.

Annual Return showing in summary form the condition of all Patients whose case records are in the possession of the Dispensaries at the end of 1927, arranged according to the years in which the patients first came under Public Medical Treatment for pulmonary tuberculosis, and their classification as shown on Form A.

Condition at the time of the last record made during the year to which the Return relates.				Previous to 1926.					1926.					1927.				
				Class T.B. minus.	Class T.B. plus.				Class T.B. minus.	Class T.B. plus.				Class T.B. minus.	Class T.B. plus.			
					Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).		Group 1.	Group 2.	Group 3.	Total (Class T.B. plus).
ALIVE.	Discharged as cured.	Adults.	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			F.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Children.	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			F.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Disease arrested.	Adults.	M.	58	16	8	1	25	—	—	—	—	—	—	—	—	—	—
			F.	27	3	5	1	9	—	—	—	—	—	—	—	—	—	—
		Children.	M.	29	2	—	—	2	—	—	—	—	—	—	—	—	—	—
			F.	26	1	—	—	1	—	—	—	—	—	—	—	—	—	—
	Disease not arrested.	Adults.	M.	27	11	34	26	71	20	6	26	—	32	33	24	31	6	61
			F.	30	5	13	8	26	34	14	7	—	21	38	17	14	1	32
		Children.	M.	13	—	—	—	—	29	5	—	—	5	23	4	—	—	4
			F.	19	—	1	—	1	15	1	1	—	2	26	2	—	—	2
CONDITION NOT ASCERTAINED DURING THE YEAR.				61	13	21	11	45	20	9	13	7	29	—	—	—	—	—
LOST SIGHT OF OR OTHERWISE REMOVED FROM DISPENSARY REGISTER				139	24	29	14	67	25	6	6	5	17	13	1	—	—	1
DEAD.		Adults.	M.	16	5	31	28	64	26	6	20	14	40	12	—	13	8	21
			F.	16	4	21	23	48	19	3	20	15	38	5	—	4	2	6
		Children.	M.	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—
			F.	—	1	1	1	3	1	—	—	—	—	1	—	—	—	—
TOTALS				461	85	164	113	362	190	50	93	41	184	151	48	62	17	127

TABLE 12B.

NON-PULMONARY TUBERCULOSIS.

Annual Return showing in summary form the condition of all Patients whose case records are in the possession of the Dispensaries at the end of 1927, arranged according to the years in which the Patients first came under Public Medical Treatment, and their classification as shown on Form A.

Condition at the time of the last record made during the year to which the Return relates.				Previous to 1926.					1926.					1927.				
				Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.	Bones and Joints.	Abdominal.	Other Organs.	Peripheral Glands.	Total.
ALIVE.	Discharged as cured.	Adults.	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			F.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Children.	M.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			F.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Disease arrested.	Adults.	M.	8	—	—	3	11	2	—	—	1	3	3	1	1	2	7
			F.	13	1	3	2	19	1	—	1	3	5	3	1	—	2	6
		Children.	M.	20	2	1	6	29	—	1	—	6	7	1	—	—	3	4
			F.	8	1	—	6	15	1	1	—	4	6	—	—	—	—	—
	Disease not arrested.	Adults.	M.	5	—	1	—	6	4	—	3	—	7	3	—	—	1	4
			F.	3	—	—	—	3	2	—	—	—	2	3	—	1	3	7
		Children.	M.	6	—	1	—	7	4	—	—	—	4	6	2	1	5	14
			F.	1	—	—	1	2	3	—	—	1	4	2	—	—	2	4
TRANSFERRED TO PULMONARY ..				—	—	—	—	—	—	—	—	—	—	2	—	—	—	2
CONDITION NOT ASCERTAINED DURING THE YEAR				16	5	1	12	34	6	—	1	5	12	—	—	—	—	—
LOST SIGHT OF OR OTHERWISE REMOVED FROM DISPENSARY REGISTER ..				19	4	3	14	40	5	1	—	3	9	—	1	—	2	3
DEAD.		Adults.	M.	2	1	—	—	3	2	1	—	—	3	—	—	—	1	1
			F.	3	—	—	1	4	—	—	—	—	—	—	2	—	1	3
		Children.	M.	—	—	—	—	—	1	—	—	—	1	—	—	—	—	—
			F.	—	—	—	—	—	—	—	—	—	—	—	1	—	—	1
TOTALS				104	14	10	45	173	31	4	5	23	63	23	8	3	22	56

SANITARY INSPECTION OF THE DISTRICT.

Visits to Premises	29,134
Tests applied to House Drains	3,894
Notices served to abate Nuisances	2,167
Notices complied with	2,250
Legal Notices served	87
Sanitary Improvements effected	7,767
Letters written	1,702
Houses systematically inspected	1,366

HOUSES LET IN LODGINGS.

Number of visits	12,973
Notices served	1,647
Notices complied with	1,481

Visits to premises in connection with Infectious Diseases	1,866
Premises disinfected	2,572
Articles disinfected	11,521

FOOD INSPECTIONS.

Number of Provision Shops inspected	2,652
Number of Fish Carts and Shops inspected	1,181
Number of Fruit Carts and Shops inspected	2,490
Amount of Food considered unfit and surrendered to District Inspectors	7 tons 11 cwts. 1 qr. 12 lbs
Number of Samples procured under the Sale of Food and Drugs Acts	800
Number of Samples found adulterated	55
Inspection of Dairies, Cowsheds and Milkshops	3,361

FACTORY AND WORKSHOP ACT.

Inspections of Bakehouses	116
,, Workshops	461
,, Factories	434
,, Outworkers' Premises	—
Notices and Letters sent *re* defects	108

Inspections of Slaughterhouses	3,314

GENERAL SANITARY WORK EFFECTED.

Number of Drains re-laid or repaired	756
Choked drains cleared	318
Soil pipes and Ventilating Shafts fixed or repaired	377
Stoneware Gully Traps fixed	661
New Water-closet Pans fixed	585
Inspection Chambers constructed	237
Flush Cisterns fixed or repaired	388
New Closets and Urinals provided	216
Surface of Courtyards, etc., re-laid or repaired	624
Refuse Bins provided	795
Premises cleansed and limewashed or papered	665
Roofs and Flats repaired	425
Foul Closets cleansed	160
Overcrowding abated	17
Offensive Manure removed	122
New Ground Floors laid and ventilated	191
Slate Tanks abolished	25
Eaves Gutters and Fall Pipes repaired	253
Wall Drains and Cesspits destroyed	18
Nuisances (caused by keeping of animals) abated	31
Other Sanitary Improvements	903
TOTAL	7,767

RATS AND MICE (DESTRUCTION) ACT, 1919.

The following represents the work carried out under the above Act during 1927.

Premises visited and re-visited	1,937
Baits laid	31,700
Rats destroyed	4,445

TABLE 14.

SAMPLES TAKEN UNDER SALE OF FOOD AND DRUGS ACTS.

Article.	*Official.*		*Informal.*		*Totals.*
	Genuine.	*Adulterated.*	*Genuine.*	*Adulterated.*	
Baking Powder	—	—	4	—	4
Beef Dripping	—	—	5	—	5
Brandy	—	—	9	—	9
Brislings in Olive Oil	—	—	1	—	1
Butter	23	—	62	—	85
Camphorated Oil	—	—	5	—	5
Castor Oil	—	—	1	—	1
Cheese	9	—	—	—	9
Chicken and Ham Roll	—	—	1	—	1
Cod Liver Oil	—	—	2	—	2
Chocolate	—	—	5	—	5
Cocoa	—	—	4	—	4
Coffee	—	—	10	—	10
Condensed Milk	—	—	6	—	6
Cream	28	2	17	3	50
Custard Powder	—	—	2	—	2
Dried Fruits	—	—	9	—	9
Egg Powder	—	—	—	1	1
Gin	1	—	1	1	3
Grape Juice	—	—	1	—	1
Green Tea	—	—	1	—	1
Ground Almonds	—	—	6	—	6
Hogs Puddings	—	—	2	—	2
Honey	—	—	4	—	4
Ice Cream	1	—	—	—	1
Jams	—	—	24	—	24
Lard	6	—	5	—	11
Lemonade Crystals	—	—	3	—	3
Margarine	—	—	14	—	14
Marmalade	2	—	4	—	6
Meat and Fish Paste	—	—	9	—	9
Mincemeat	—	—	1	—	1
Minced Meat	—	—	3	—	3
Olive Oil	—	—	2	—	2
Orange Crush Cordial	—	—	1	—	1
Pepper	—	—	2	—	2
Raw Milk	374	39	25	3	441
Rum	—	—	4	—	4
Saffron Self-raising Flour	—	—	2	—	2
Saffron	—	—	4	2	6
Sausages	—	—	12	1	13
Scald Milk	6	1	—	—	7
Self-raising Flour	—	—	5	—	5
Spirits of Sweet Nitre	—	—	2	—	2
Sweets	—	—	1	—	1
Tincture of Iodine	—	—	2	—	2
Tinned Cream	—	—	1	—	1
Vinegar	—	—	4	—	4
Whisky	—	—	7	2	9
	450	42	295	13	800

TABLE 15.

UNSOUND MEAT DESTROYED DURING THE YEAR.

DISEASE.	*CARCASES.*				*ORGANS.*							
	Beef.	*Veal.*	*Mutton.*	*Pork.*	*Lungs.*	*Hearts.*	*Livers.*	*Kidneys.*	*Heads. Tongues.*	*Spleens.*	*Mesenteries.*	*Stomachs.*
Tuberculosis	185	—	—	33	1,152	1,140	994	434	698	536	616	458
Actinomycosis	—	—	—	—	—	—	—	—	115	—	—	—
Pyaeima	1	—	—	—	2	2	5	2	1	1	1	1
Abscess	—	½	3	½	71	50	268	24	105	6	12	20
Emaciation	85	1	20	—	91	90	90	166	89	79	79	81
Dropsy	114½	24	196½	11	227	224	217	377	353	149	191	190
Pneumonia	—	—	—	—	29	19	—	—	—	—	—	—
Septicæmia	10	1	—	2	11	11	11	22	11	11	11	11
Pericarditis	4	1	6¼	—	26	28	—	—	—	—	—	—
Pleurisy	—	—	—	—	4	—	—	—	—	—	—	—
Angioma	—	—	—	—	—	—	179	—	—	—	—	—
Fœtal Flesh	—	—	—	—	—	—	—	—	—	—	—	—
Decomposition	5½	9¼	18	4	51	46	68	19	31	7	9	19
Flukes	—	—	—	—	—	—	380	—	—	—	—	—
Cirrhosis	—	—	—	—	—	—	2,162	—	—	—	—	—
Necrosis	—	—	—	—	—	—	—	—	—	—	—	—
Inflammation	8¼	3	6	6	95	79	98	52	32	25	32	34
Red Water	5	—	10	—	47	48	46	80	27	42	28	32
Cysts	—	—	—	—	4	4	16	12	—	—	—	—
Suffocation	—	—	9	—	1	1	1	11	1	—	—	—
Swine Fever	—	—	—	—	—	—	—	—	—	—	—	—
Bruised	—	1	—	—	1	1	1	11	—	—	—	—
Jaundice	—	1	—	1	1	1	1	11	1	—	—	—

The number of Animals slaughtered in the Borough for the year was 49,514 made up as follows :—
Bovines, 17,119, Sheep and Lamb, 29,263, Calves, 1,332, and Pigs, 1,800.

TABLE 16.

OTHER UNSOUND FOOD DESTROYED.

The number of shops and carts inspected was 5,142.

Quantity surrendered to Sanitary Inspectors, and destroyed :—

FRUIT	*Tons*	*cwts.*	*qrs.*	*lbs.*
Apples	0	18	1	16
Bananas	0	0	0	1
Chestnuts	0	9	2	16
Grapes	0	0	0	2
Oranges	0	0	1	2
Strawberries	0	0	3	8
Tomatoes	0	2	3	20
VEGETABLES—				
Potatoes	3	5	0	0
PROVISIONS—				
Bacon	0	3	0	9
Kippers	0	1	2	0
MEAT—From Food Factories, Etc.—				
Beef	0	1	2	13½
Offal	0	0	1	12
Pigs' Kidneys	0	0	0	½
Pigs' Plucks	0	0	0	6
Pork (Pigs' Heads, etc.)	1	18	3	2½
Tongues	0	0	0	6
Veal	0	1	1	6

TINNED GOODS—	
Beef	55 tins
Crab	1 tin
Condensed Milk	4 tins
Ox Tongue	88 ,,
Salmon	5 ,,

TABLE 17.

Factories, Workshops and Workplaces.

1.—INSPECTION OF FACTORIES, WORKSHOPS AND WORKPLACES.

Including Inspections made by Sanitary Inspectors.

Premises. (1)	*Number of*		
	Inspections. (2)	*Written Notices.* (3)	*Occupiers prosecuted.* (4)
FACTORIES (Including Factory Laundries)	434	30	—
WORKSHOPS (Including Workshop Laundries)	539	111	—
WORKPLACES (Other than Outworkers' premises)	—	—	—
Total	973	141	—

2.—DEFECTS FOUND IN FACTORIES, WORKSHOPS AND WORKPLACES.

Particulars. (1)	*Number of Defects.*			*Number of offences in respect to which Prosecutions were instituted.* (5)
	Found. (2)	*Remedied.* (3)	*Referred to H.M. Inspector.* (4)	
Nuisances under the Public Health Acts :—				
Want of cleanliness	81	87	—	—
Want of ventilation	2	2	—	—
Overcrowding	—	—	—	—
Want of drainage of floors	1	1	—	—
Other nuisances	25	27	—	—
Sanitary accommodation — insufficient	7	8	—	—
Sanitary accommodation — unsuitable or defective ..	33	31	—	—
Sanitary accommodation — not separate for sexes ..	3	1	—	—
Offences under the Factory and Workshop Acts :—				
Illegal occupation of underground bakehouse (s. 101) ..	—	—	—	—
Other offences	—	—	—	—
Total	152	157	—	—

TABLE 18.

HOUSING STATISTICS, 1927.

Number of new houses erected during the year	740
(*a*) Total (including numbers given separately under (*b*)	520
(*b*) With state assistance under the Housing Acts :	
(*i.*) By the Local Authority	390
(*ii.*) By other bodies or persons	350

1. UNFIT DWELLING-HOUSES.

Inspection—	
(1) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts)	1,622
(2) Number of dwelling-houses which were inspected and recorded under the Housing Consolidated Regulations, 1910, or the Housing Consolidated Regulations, 1925	256
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	13
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	243

2. REMEDY OF DEFECTS WITHOUT SERVICE OF FORMAL NOTICES.

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their officers	12

3. ACTION UNDER STATUTORY POWERS.

A.—Proceedings under section 3 of the Housing Act, 1925.	
(1) Number of dwelling-houses in respect of which notices were served requiring repairs	241
(2) Number of dwelling-houses which were rendered fit after service of formal notices :—	
(*a*) By owners	221
(*b*) By Local Authority in default of owners	1
(*c*) By Local Authority with consent of owners	33
(3) Number of dwelling-houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close	Nil.
B.—Proceedings under Public Health Acts.	
(1) Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	2,167
(2) Number of dwelling-houses in which defects were remedied after service of formal notices—	
(*a*) By Owners	2,250
(*b*) By Local Authority in default of owners	3
C.—Proceedings under sections 11, 14 and 15 of the Housing Act, 1925.	
(1) Number of representations made with a view to the making of Closing Orders	13
(2) Number of dwelling-houses in respect of which Closing Orders were made	13
(3) Number of dwelling-houses in respect of which Closing Orders were determined, the dwelling houses having been rendered fit	9
(4) Number of dwelling-houses in respect of which Demolition Orders were made	2
(5) Number of dwelling-houses demolished in pursuance of Demolition Orders	23
(6) Number of dwelling-houses in respect of which Closing and Demolition Orders have been determined, the dwelling-houses having been rendered fit	5

TABLE 19.

BACTERIOLOGICAL LABORATORY WORK DONE DURING THE YEAR 1927.

Disease.	*Borough Hospitals.*	*Medical Practitioners.*	*Tuberculosis Dispensary.*	*School Medical Department.*	*M.O.H.*	*Total.*
Diphtheria	3,523	689	—	1,649	133	5,994
Enteric Fever	8	12	—	—	—	20
Tuberculosis (Sputum) ..	—	619	1,589	—	—	2,208
Cerebro-Spinal Fever ..	6	4	—	—	—	10
Ringworm	2	—	—	161	—	163
Urine	11	25	17	—	—	53
Milk	—	—	—	—	884	884
Tap Water	—	—	—	—	26	26
Sea Water	—	—	—	—	111	111
Rats	—	—	—	—	145	145
Animal Inoculation	—	—	—	—	18	18
Fæces	8	6	1	—	—	15
Oysters	—	—	—	—	36	36
Lochia	3	12	—	—	2	17
Mussels	—	—	—	—	5	5
Others	—	22	3	—	14	39
Totals ..	3,561	1,389	1,610	1,810	1,374	9,744

TABLE 20.

SUMMARY OF HEALTH EDUCATION WORK DONE.

Designs for slides submitted	65
Designs for slides accepted	37
Number of Cinematograph slides made during 1927	252
Number of slides exhibited in Cinemas and Theatres	16,470
Number of Film shows	13
Number of Films shown during Health Week	24
Attendances at Film Shows	4,100
Number of Leaflets distributed	66,000
Number of Posters displayed	1,434
Number of " Better Health " Magazines circulated	25,000
Number of Blocks made	29
Number of " Health Hints " Booklets circulated	5,000
Number of posters exhibited in local Tramcars showing the Health Services of Plymouth	100
Advertisements *re* V.D. Treatment inserted in local newspapers	52
Enamel plates placed in Conveniences showing times of Clinics	73
Number of large enamel plates exhibited at Railway Stations, Tuberculosis and Maternity and Child Welfare Centres	10
Memoranda Books circulated to Doctors showing Health Services available	100
One Runsyne Advertising Machine was fixed in the centre of the Town giving " Health Talks " and other messages	

One Stall at the Grocers' Exhibition.

TABLE 21.

ELEMENTARY SCHOOLS.

RETURN OF MEDICAL INSPECTIONS FOR THE YEAR ENDED 31st DECEMBER, 1927.

A.—ROUTINE MEDICAL INSPECTIONS.

Number of Code Group Inspections—		
Entrants	3,621	
Intermediates	2,858	
Leavers	2,010	
		8,489
Number of other Routine Inspections		78
		8,567

B.—OTHER INSPECTIONS.

Number of Special Inspections	9,572
Number of Re-inspections	9,352
	18,924

TABLE 22.

ELEMENTARY SCHOOLS.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1927.

	Defect or Disease. (1)	Routine Inspections. No. of Defects. Requiring Treatment. (2)	Routine Inspections. No. of Defects. Requiring to be kept under observation but *not* requiring Treatment. (3)	Special Inspections. No. of Defects. Requiring Treatment. (4)	Special Inspections. No. of Defects. Requiring to be kept under observation but *not* requiring Treatment. (5)
	Malnutrition	35	25	6	4
	Uncleanliness	—	—	—	—
	(See Table IV, Group V)				
Skin	Ringworm—Scalp	1	—	105	—
	Body	—	—	217	—
	Scabies	6	—	54	—
	Impetigo	35	—	521	—
	Other Diseases (non-tuberculous)	115	4	1,267	3
Eye	Blepharitis	25	—	26	—
	Conjunctivitis	17	—	69	—
	Keratitis	2	—	7	—
	Corneal Opacities	7	3	2	—
	Defective Vision (excluding Squint)	482	250	208	3
	Squint	59	116	54	1
	Other conditions	21	7	63	1
Ear	Defective Hearing	42	4	14	1
	Otitis Media	59	—	160	—
	Other Ear Diseases	20	—	25	—
Nose and Throat	Enlarged Tonsils only	408	545	58	1
	Adenoids only	14	4	15	—
	Enlarged Tonsils and Adenoids	35	16	32	—
	Other Conditions	91	7	422	1
	Enlarged Cervical Glands (non-tuberculous)	42	11	3	1
	Defective Speech	82	13	7	1
	Teeth—Dental Diseases	1,643	—	12	—
	(See Table IV, Group IV)				
Heart and Circulation	Heart Disease:				
	Organic	12	21	9	3
	Functional	16	58	10	1
	Anæmia	211	5	146	5
Lungs	Bronchitis	300	2	289	3
	Other Non-Tuberculous Diseases	66	22	173	—
Tuberculosis	Pulmonary:				
	Definite	1	—	11	—
	Suspected	8	3	19	—
	Non-Pulmonary:				
	Glands	2	—	13	—
	Spine	—	1	3	—
	Hip	—	—	7	—
	Other Bones and Joints	2	—	4	—
	Skin	—	—	5	—
	Other Forms	1	1	12	11
Nervous System	Epilepsy	3	1	5	—
	Chorea	6	—	15	—
	Other Conditions	31	13	2	—
Deformities	Rickets	12	22	7	—
	Spinal Curvature	3	—	2	—
	Other Forms	30	20	14	—
	Other Defects and Diseases	197	28	4,333	126

TABLE 23.

ELEMENTARY SCHOOLS.

B. NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

Group. (1)	*No. of Children.*		*Percentage of Children found to require treatment.* (4)
	Inspected. (2)	*Found to require treatment.* (3)	
Code Groups.			
Entrants	3,621	1,090	30.1
Intermediates	2,858	759	26.6
Leavers	2,010	607	30.2
Total (Code Groups) ..	8,489	2,456	28.9
Other Routine Inspections	78	22	28.2

TABLE 24. ELEMENTARY SCHOOLS.

RETURN OF ALL EXCEPTIONAL CHILDREN IN THE AREA.

			Boys.	*Girls.*	*Total.*
Blind (including partially Blind).	(*i*) Suitable for training in a School or Class for the totally blind.	Attending Certified Schools or Classes for the Blind	1	6	7
		Attending Public Elementary Schools . .	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	—	1	1
	(*ii*) Suitable for training in a School or Class for the partially blind.	Attending Certified Schools or Classes for the Blind	—	—	—
		Attending Public Elementary Schools . .	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
Deaf (including deaf and dumb and partially deaf).	(*i*) Suitable for training in a School or Class for the totally deaf or deaf and dumb.	Attending Certified Schools or Classes for the Deaf	21	18	39
		Attending Public Elementary Schools . .	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
	(*ii*) Suitable for training in a School or Class for the partially deaf.	Attending Certified Schools or Classes for the Deaf	—	—	—
		Attending Public Elementary Schools . .	3	1	4*
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
Mentally Defective.	Feeble-minded (cases not notifiable to the Local Control Authority).	Attending Certified Schools for Mentally Defective Children—Residential . .	8	6	14
		Day	179	103	282
			187	109	296
		Attending Public Elementary Schools . .	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	—	—	—
	Notified to the Local Control Authority during the year.	Feeble-minded	14	7	21
		Imbeciles	1	5	6
		Idiots	5	1	6
Epileptics.	Suffering from severe epilepsy.	Attending Certified Special Schools for Epileptics	1	4	5
		In Institutions other than Certified Special Schools	—	—	—
		Attending Public Elementary Schools . .	—	—	—
		At no School or Institution	—	1	1
	Suffering from epilepsy which is not severe.	Attending Public Elementary Schools . .	8	5	13
		At no School or Institution	—	—	—
Physically Defective.	†Infectious pulmonary and glandular tuberculosis.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	7	5	12
		At other Institutions	—	1	1
		At no School or Institution	2	3	5
	†Non-infectious but active pulmonary and glandular tuberculosis.	At Sanatoria or Sanatorium Schools approved by the Ministry of Health or the Board	13	4	17
		At Certified Residential Open-Air Schools	—	—	—
		At Certified Day Open-Air Schools . .	7	17	24
		At Public Elementary Schools	—	1	1
		At other Institutions	—	—	—
		At no School or Institution	8	11	19
	Delicate children (*e.g.* pre- or latent tuberculosis, malnutrition, debility, anæmia, etc.).	At Certified Residential Open-Air Schools	—	—	—
		At Certified Day Open-Air Schools . .	125	153	278
		At Public Elementary Schools	—	1	1
		At other Institutions	1	1	2
		At no School or Institution	4	4	8
	†Active non-pulmonary tuberculosis.	At Sanatoria or Hospital Schools approved by the Ministry of Health or the Board	9	4	13
		At Public Elementary Schools	—	—	—
		At other Institutions	—	—	—
		At no School or Institution	3	—	3
	Crippled Children (other than those with active tuberculous disease), *e.g.* children suffering from paralysis, etc., and including those with severe heart disease.	At Certified Hospital Schools	1	2	3
		At Certified Residential Cripple Schools	1	—	1
		At Certified Day Cripple Schools . .	—	—	—
		At Public Elementary Schools	81	60	141‡
		At other Institutions (Open-Air Schools)	17	13	30
		At no School or Institution	5	7	12

Notes.—* Making good progress at ordinary Elementary School, and at present not certified.

† Tuberculosis Officer's classification.

‡ These children are not certified "Physical Defectives," and they are capable of receiving proper benefit from education in Elementary Schools, and where necessary are receiving treatment at the Orthopædic Clinics.

TABLE 25.

ELEMENTARY SCHOOLS.

RETURN OF DEFECTS TREATED DURING THE YEAR ENDED 31st DECEMBER, 1927.

TREATMENT TABLE.

Group I.—MINOR AILMENTS (Excluding Uncleanliness, for which see Group V).

Disease or Defect. (1)	*Number of Defects treated, or under treatment during the year.* *Under the Authority's Scheme.* (2)	*Otherwise.* (3)	*Total.* (4)
Skin—			
Ringworm—Scalp	97	6	103
Ringworm—Body	217	—	217
Scabies	54	—	54
Impetigo	519	1	520
Other Skin Diseases	1,254	6	1,260
Minor Eye Defects—(External and other, but excluding cases falling in Group II).	327	83	410
Minor Ear Defects	178	21	199
Miscellaneous—Minor (*e.g.* minor injuries, bruises, sores, chilblains, etc.) ..	3,004	43	3,047
Miscellaneous—Other	948	1,430	2,378
TOTAL ..	6,598	1,590	8,188

N.B.—31 cases of Ringworm of the Scalp were treated by X-ray during the year.

TABLE 25.—(continued)

Group II.—DEFECTIVE VISION AND SQUINT (excluding Minor Eye Defects treated as Minor Ailments—Group I).

Defect or Disease. (1)	*Number of defects dealt with.* *Under the Authority's Scheme.* (2)	*Submitted to refraction by private practitioner or at Hospital, apart from the Authority's Scheme.* (3)	*Otherwise.* (4)	*Total.* (5)
Errors of Refraction (including Squint)	710	149	—	859
Other Defect or Disease of the eyes (excluding those recorded in Group I)	273	—	39	312
TOTAL ..	983	149	39	1,171

Total Number of Children for whom Spectacles were prescribed :—

(*a*)	Under the Authority's Scheme	675
(*b*)	Otherwise	138

Total Number of Children who obtained or received Spectacles :—

(*a*)	Under the Authority's Scheme	667
(*b*)	Otherwise	146

In addition to the above, 25 new pairs of Spectacles were supplied to replace breakages, and 219 minor repairs to Spectacles carried out.

The total number of new cases attending the Eye Clinic was 1,046.

TABLE 25.—(continued).

Group III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

NUMBER OF DEFECTS.

Received Operative Treatment.			*Received other forms of Treatment.* (4)	*Total number treated.* (5)
Under the Authority's Scheme, in Clinic or Hospital. (1)	*By Private Practitioner or Hospital, apart from the Authority's Scheme.* (2)	*Total.* (3)		
79	43	122	813	935

TABLE 25.—continued.

Group IV.—DENTAL DEFECTS.

(1) Number of Children who were :—

(*a*) Inspected by the Dentist :

Aged :

	Aged	Number		Total
Routine Age Groups	5	1,305	Total	10,636
	6	1,733		
	7	2,113		
	8	1,561		
	9	1,488		
	10	1,252		
	11	716		
	12	244		
	13	200		
	14	24		
Specials				3,938
			Grand Total	14,574

(*b*)	Found to require treatment	9,722
(*c*)	Actually treated	6,497
(*d*)	Re-treated during the year as the result of periodical examination	1,382

(2)	Half-days devoted to—		
	Inspection	123	
	Treatment	905	— 1,028
(3)	Attendances made by children for treatment		9,108
(4)	Fillings—		
	Permanent Teeth	1,726	
	Temporary Teeth	1,246	— 2,972
(5)	Extractions—		
	Permanent Teeth	2,105	
	Temporary Teeth	14,117	— 16,222
(6)	Administrations of general Anæsthetics for extractions		2,764
(7)	Other Operations—		
	Permanent Teeth	776	
	Temporary Teeth	518	— 1,294

TABLE 25.—continued.

Group V.—UNCLEANLINESS AND VERMINOUS CONDITIONS.

(i.) Average number of visits per school made during the year by the School Nurses—Boys' Departments, 1.8; Girls', 4.3; Infants', 3.9.

(ii.) Total number of examinations of children in the Schools by School Nurses—65,979.

(iii.) Number of individual children found unclean—5,781.

(iv.) Number of children cleansed under arrangements made by the Local Education Authority—473.

(v.) Number of cases in which legal proceedings were taken :—

(*a*)	Under the Education Act, 1921 ..	Nil.
(*b*)	Under School Attendance Bye-laws ..	Nil.

TABLE 26.

SECONDARY SCHOOLS.

RETURN OF MEDICAL INSPECTIONS FOR THE YEAR ENDED 31st DECEMBER, 1927.

ROUTINE MEDICAL INSPECTIONS.

	Age.										Total.
	8	9	10	11	12	13	14	15	16	17 & over	
Boys ..	—	—	21	82	101	61	53	89	15	10	432
Girls ..	—	—	17	135	209	218	78	21	20	26	724
Total	—	—	38	217	310	279	131	110	35	36	1156

TABLE 27.

SECONDARY SCHOOLS.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1927.

Defect or Disease. (1)		Routine Inspections.		Special Inspections.	
		No. of Defects.		No. of Defects.	
		Requiring Treatment. (2)	Requiring to be kept under observation but *not* requiring Treatment. (3)	Requiring Treatment. (4)	Requiring to be kept under observation but *not* requiring Treatment. (5)
	Malnutrition	1	2	—	—
Skin	Ringworm :				
	Scalp	—	—	—	—
	Body	—	—	—	—
	Scabies	—	—	—	—
	Impetigo	1	—	—	—
	Other Diseases (non-tuberculous)	16	—	—	—
Eye	Blepharitis	—	—	—	—
	Conjunctivitis	1	—	—	—
	Keratitis	—	—	—	—
	Corneal Opacities	—	1	—	—
	Defective Vision (excluding Squint)	90	107	1	—
	Squint	1	4	—	—
	Other Conditions	4	—	—	—
Ear	Defective Hearing	2	6	—	—
	Otitis Media	1	—	—	—
	Other Ear Diseases	1	—	—	—
Nose and Throat	Enlarged Tonsils only	12	59	—	—
	Adenoids only	1	—	—	—
	Enlarged Tonsils and Adenoids	—	8	—	—
	Other Conditions	18	—	—	—
Enlarged Cervical Glands (non-tuberculous)		4	2	—	—
Defective Speech		9	—	—	—
Teeth—Dental Diseases		214	—	—	—
Heart and Circulation	Heart Disease :				
	Organic	3	7	—	—
	Functional	6	41	—	—
	Anæmia	39	—	—	—
Lungs	Bronchitis	6	—	—	—
	Other Non-Tuberculous Diseases	—	3	—	—
Tuberculosis.	Pulmonary :				
	Definite	—	—	—	—
	Suspected	—	1	—	—
	Non-Pulmonary :				
	Glands	—	—	—	—
	Spine	—	—	—	—
	Hip	—	—	—	—
	Other Bones and Joints	—	—	—	—
	Skin	—	—	—	—
	Other Forms	—	—	—	—
Nervous System	Epilepsy	—	—	—	—
	Chorea	—	—	—	—
	Other Conditions	15	1	—	—
Deformities	Rickets	1	5	—	—
	Spinal Curvature	1	4	—	—
	Other Forms	58	7	—	—
Other Defects and Diseases		37	3	—	—

TABLE 28.

SECONDARY SCHOOLS.

NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

Group. (1)	*Number of Children.* *Inspected.* (2)	*Number of Children.* *Found to require treatment.* (3)	*Percentage of Children found to require treatment.* (4)
Total ..	1,156	313	27.1

TABLE 29.

SECONDARY SCHOOLS.

DEFECTIVE VISION AND SQUINT.

Defect or Disease. (1)	*Number of Defects dealt with.*			
	Under the Authority's Scheme. (2)	*Submitted to refraction by private practitioner or at Hospital, apart from the Authority's Scheme.* (3)	*Otherwise.* (4)	*Total.* (5)
Errors of Refraction (including Squint) ..	44	41	—	85
Other Defect or Disease of the Eyes ..	—	—	—	—
TOTAL ..	44	41	—	85

Total number of Children for whom Spectacles were prescribed :—

(*a*)	Under the Authority's Scheme	41
(*b*)	Otherwise	38

Total number of Children who obtained or received Spectacles :—

(*a*)	Under the Authority's Scheme	41
(*b*)	Otherwise	38

TABLE 30.

SECONDARY SCHOOLS.

TREATMENT OF DEFECTS OF NOSE AND THROAT.

NUMBER OF DEFECTS.

Received Operative Treatment.			*Received other forms of Treatment.* (4)	*Total number treated.* (5)
Under the Authority's Scheme in Clinic or Hospital. (1)	*By Private Practitioner or Hospital, apart from the Authority's Scheme.* (2)	*Total.* (3)		
—	—	—	3	3

TABLE 31.

OTHER HIGHER SCHOOLS.

RETURN OF MEDICAL INSPECTIONS FOR THE YEAR ENDED 31st DECEMBER, 1927.

ROUTINE MEDICAL INSPECTIONS.

	Age.							
	11	12	13	14	15	16	17	*Total.*
Boys	—	—	78	98	77	5	—	258
Girls	—	—	116	113	96	55	7	387
TOTAL ..	—	—	194	211	173	60	7	645

TABLE 32.

OTHER HIGHER SCHOOLS.

A. RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR ENDED 31st DECEMBER, 1927.

Defect or Disease. (1)		Routine Inspections. No. of Defects. Requiring Treatment. (2)	Routine Inspections. No. of Defects. Requiring to be kept under observation but *not* requiring Treatment. (3)	Special Inspections. No. of Defects. Requiring Treatment. (4)	Special Inspections. No. of Defects. Requiring to be kept under observation but *not* requiring Treatment. (5)
	Malnutrition	1	6	—	—
Skin	Ringworm :				
	Scalp	—	—	—	—
	Body	—	—	—	—
	Scabies	—	—	—	—
	Impetigo	—	—	—	—
	Other Diseases (non-tuberculous)	16	—	—	—
Eye	Blepharitis	3	—	—	—
	Conjunctivitis	3	—	—	—
	Keratitis	—	—	—	—
	Corneal Opacities	2	7	—	—
	Defective Vision (excluding Squint)	60	63	—	—
	Squint	—	5	—	—
	Other Conditions	4	—	—	—
Ear	Defective Hearing	5	2	—	—
	Otitis Media	1	—	—	—
	Other Ear Diseases	2	—	—	—
Nose and Throat	Enlarged Tonsils only	6	32	—	1
	Adenoids only	1	—	—	—
	Enlarged Tonsils and Adenoids	5	10	—	—
	Other Conditions	6	2	—	—
Enlarged Cervical Glands (non-tuberculous)		4	—	—	—
Defective Speech		1	2	—	—
Teeth—Dental Diseases		151	—	—	—
Heart and Circulation	Heart Disease :				
	Organic	5	11	—	—
	Functional	5	27	—	—
	Anæmia	31	—	1	—
Lungs	Bronchitis	10	—	—	—
	Other Non-Tuberculous Diseases	—	—	—	—
Tuberculosis	Pulmonary :				
	Definite	—	—	—	—
	Suspected	—	—	—	—
	Non-Pulmonary :				
	Glands	1	—	—	—
	Spine	—	—	—	—
	Hip	—	1	—	—
	Other Bones and Joints	1	—	—	—
	Skin	—	—	—	—
	Other Forms	—	—	—	—
Nervous System	Epilepsy	—	—	—	—
	Chorea	—	—	—	—
	Other Conditions	12	—	—	—
Deformities	Rickets	—	7	—	—
	Spinal Curvature	4	1	—	—
	Other Forms	35	3	—	—
Other Defects and Diseases		25	1	—	—

TABLE 33.

NUMBER OF INDIVIDUAL CHILDREN FOUND AT ROUTINE MEDICAL INSPECTION TO REQUIRE TREATMENT (EXCLUDING UNCLEANLINESS AND DENTAL DISEASES).

Group. (1)	*Number of Children.*		*Percentage of Children found to require treatment.* (4)
	Inspected. (2)	*Found to require treatment.* (3)	
Total ..	645	228	35.3

TABLE 34.

OTHER HIGHER SCHOOLS.

DEFECTIVE VISION AND SQUINT.

Defect or Disease. (1)	*Number of defects dealt with.*			
	Under the Authority's Scheme. (2)	*Submitted to refraction by private Practitioner or at Hospital, apart from the Authority's Scheme.* (3)	*Otherwise.* (4)	*Total.* (5)
Errors of Refraction (including Squint) ..	19	23	—	42
Other Defect or Disease of the Eyes ..	—	—	—	—
TOTAL ..	19	23	—	42

Total number of Children for whom Spectacles were prescribed :—

(*a*)	Under the Authority's Scheme	19
(*b*)	Otherwise	22

Total number of Children who obtained or received Spectacles :—

(*a*)	Under the Authority's Scheme	19
(*b*)	Otherwise	22

TABLE 35.

OTHER HIGHER SCHOOLS.

TREATMENT OF DEFECTS OF NOSE AND THROAT.

NUMBER OF DEFECTS.

Received Operative Treatment.			*Received other forms of Treatment.* (4)	*Total number treated.* (5)
Under the Authority's Scheme, in Clinic or Hospital. (1)	*By Private Practitioner or Hospital, apart from the Authority's Scheme.* (2)	*Total.* (3)		
1	—	1	—	1

TABLE 36.

RECORDS OF VESSELS INSPECTED, TONNAGES, CREWS, PASSENGERS, SICKNESSES, ETC., FOR THE TEN YEARS ENDED 1927.

Year.	No. of vessels Inspected.	Nationality.		No. of crews on board.	Registered Tonnage.	Passengers.		Sickness.		Deaths.	Landed for Treatment.	Insanitary	
		British.	Foreign.			On Board	Landing.	during voyage.	Infectious.			No. of vessels.	No. of defects.
1918	1,432	1,386	46	20,091	865,069	6,069	6,055	3,913	119	216	77	117	718
1919	1,561	1,340	221	65,775	2,056,621	122,326	76,584	3,942	2,814	114	7	124	634
1920	1,879	1,302	577	86,814	2,172,097	130,543	19,777	898	796	83	5	133	663
1921	1,950	1,475	475	100,830	2,729,713	131,077	15,892	507	350	60	6	154	686
1922	2,056	1,543	513	132,266	3,642,135	117,293	22,596	312	487	65	2	147	610
1923	2,195	1,571	624	142,960	4,197,209	105,805	22,657	501	301	52	1	160	542
1924	2,403	1,769	634	166,106	4,228,321	122,266	25,132	732	526	48	3	174	737
1925	2,657	1,900	757	186,184	4,884,659	158,408	38,406	625	463	59	—	179	912
1926	2,967	2,208	759	208,693	5,564,945	176,731	40,264	609	338	73	8	161	889
1927	3,282	2,527	755	230,809	6,196,506	193,031	46,196	630	365	47	26	172	847

TABLE 37.

SHIPPING ENTERING THE PORT OF PLYMOUTH, 1927.

	Number.	Registered Tonnage.	Number Inspected by the Port M.O.	Number Inspected by the Insp.	Number of vessels Insanitary.	Number of defects found.	Number of Informal Notices Issued.	Number of Stat'ry. Orders Served.
FOREIGN—								
Steamers ..	1,021	5,384,116	660	544	64	419	64	
Motor ..	118	221,672	50	72	10	35	10	Nil.
Sailing ..	181	9,444	23	181	22	62	22	
Fishing	132	5,782	17	132	10	17	10	
Total Foreign	1,452	5,621,014	750	929	106	533	106	Nil.
COASTWISE—								
Steamers ..	1,131	535,951	40	1,141	38	210	38	
Motor ..	327	18,933	20	327	11	30	11	Nil.
Sailing ..	280	16,809	32	280	17	74	17	
Fishing ..	92	3,799	13	92	—	—	—	
Total Coastwise	1,830	575,492	105	1,840	66	314	66	Nil.
Total Foreign and Coastwise	3,282	6,196,506	855	2,769	172	847	172	Nil.

TABLE 38.

CASES OF INFECTIOUS SICKNESS DEALT WITH DURING THE YEARS 1922–1926 INCLUSIVE.

Disease.	1922				1923				1924				1925				1926				Grand Total.	Five Years Average.
	How Disposed of				How Disposed of				How Disposed of				How Disposed of				How Disposed of					
	During Voyage.	Landed at Plymouth	Proceeded in Ship.	Total.	During Voyage.	Landed at Plymouth	Proceeded in Ship.	Total.	During Voyage.	Landed at Plymouth.	Proceeded in Ship.	Total.	During Voyage.	Landed at Plymouth.	Proceeded in Ship.	Total.	During Voyage.	Landed at Plymouth.	Proceeded in Ship.	Total.		
Smallpox	3	—	—	3	3	1	—	4	9	3	—	12	7	—	—	7	3	1	1	5	31	6.2
Scarlet Fever	—	—	1	1	—	—	1	1	1	—	5	6	2	—	2	4	1	—	1	2	14	2.8
Diphtheria	2	1	—	3	1	—	—	1	—	—	2	2	—	2	1	3	1	1	—	2	11	2.2
Enteric or Typhoid Fever	4	1	4	9	3	—	1	4	6	3	6	15	5	2	3	10	8	2	4	14	52	10.4
Pneumonia	18	5	8	31	7	2	11	20	14	5	13	32	7	5	11	23	13	5	5	23	129	25.8
Plague	5	—	—	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	1.0
Encephalitis Lethargica	—	—	1	1	—	—	1	1	—	—	—	—	—	1	—	1	—	—	—	—	3	.6
Dysentery	8	3	7	18	3	2	1	6	4	1	4	9	17	4	7	28	7	4	11	22	83	16.6
Erysipelas	1	—	—	1	—	—	—	—	—	—	2	2	—	—	1	1	—	1	3	4	8	1.6
Respiratory Tuberculosis	2	5	10	17	5	5	12	22	18	7	20	45	9	5	22	36	8	5	12	25	145	29.0
Other Forms .. .	1	—	2	3	1	1	1	3	—	—	—	—	1	—	2	3	3	1	2	6	15	3.0
Malaria contracted abroad	190	10	23	223	77	12	32	121	85	11	80	176	145	34	34	213	36	12	38	86	819	163.8
Chicken-pox	10	3	—	13	5	—	6	11	1	2	9	12	1	2	11	14	6	3	8	17	67	13.4
Measles	4	4	3	11	10	3	48	61	58	5	12	75	37	3	15	55	27	2	18	47	249	49.8
Whooping Cough ..	1	2	1	4	2	4	3	9	—	—	2	2	—	1	3	4	1	3	5	9	28	5.6
Paratyphoid (excluded in Typhoid column) ..	2	—	—	2	2	—	1	3	1	—	—	1	—	—	2	2	1	—	1	2	10	2.0
Ainstrim	—	—	—	—	—	—	1	1	—	—	—	—	—	—	—	—	—	—	—	—	1	.2
Beriberi	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	2	2	.4
Blackwater Fever ..	—	1	1	2	—	1	3	4	2	—	1	3	—	—	1	1	1	—	2	3	13	2.6
Dengue Fever	—	—	—	—	—	—	—	—	52	—	37	89	1	—	7	8	2	—	—	2	99	19.8
Influenza	95	8	12	115	7	1	6	14	10	1	10	21	7	—	4	11	14	4	10	28	189	37.8
Leprosy	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	1	.2
Mumps	1	4	5	10	1	—	8	9	—	2	1	3	2	1	5	8	—	—	8	8	38	7.6
Ringworm	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	—	—	—	—	1	.2
Scabies	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	1	.2
Scarlatina	—	1	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	.2
Sleeping Sickness .	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	—	—	—	1	.2
Venereal Disease ..	1	2	11	14	1	1	3	5	6	4	10	20	9	9	12	30	13	3	12	28	97	19.4
Yellow Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	2	2	.4
Totals .	348	50	89	487	129	33	139	301	267	45	214	526	250	70	143	463	148	48	142	338	2,115	423.0

TABLE 39.

RATS DESTROYED DURING 1927.

I. On Vessels.

	Jan.	*Feb.*	*Mar.*	*April*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Total*
Black Rats	8	—	—	—	—	—	—	36	86	1	21	—	152
Brown Rats	12	—	—	—	—	—	—	10	2	—	—	—	24
Rats examined	20	—	—	—	—	—	—	46	88	1	21	—	176
Rats infected with Plague	—	—	—	—	—	—	—	—	—	—	—	—	—

II. In Docks, Quays, Wharves and Warehouses.

	Jan.	*Feb.*	*Mar.*	*April*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Total.*
Black Rats	3	4	1	8	2	1	2	4	3	1	3	2	34
Brown Rats	1151	463	787	1026	913	803	859	835	1051	1458	1446	2375	13167
Rats examined	266	263	315	269	320	283	319	281	389	567	569	500	4341
Rats infected with Plague	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE 40.

DETAILED LIST OF SANITARY DEFECTS FOR THE YEAR.

During the year 172 vessels were found to be in an insanitary condition, the following defects being notified to the Masters, Owners or Agents :—

No. of Defects	Nature of Defects.
7	Bathrooms to be cleansed.
1	Bilge to be pumped out and cleansed.
21	Bedding (sets of) to be thoroughly cleansed.
10	Bedding (sets of) to be thoroughly cleansed and fumigated.
3	Bogey Stoves to be repaired and replaced by new.
54	Bunks to be cleansed and painted.
1	Calves' pen to be thoroughly cleansed.
5	Chain lockers, combings and hatches to be cleansed and limewashed.
10	Clothes (complete) to be thoroughly cleansed and fumigated.
2	Clothes (complete) of patient to be removed for disinfection.
9	Cookhouses to be cleansed and limewashed.
4	Cooking utensils (sets of) to be cleansed on the inside.
27	Cowls to be fitted to ventilators.
87	Crews' quarters to be cleansed, painted or limewashed.
28	Crews' quarters to be dried and ventilated.
9	Crews' quarters to be fumigated and cleansed.
8	Decks over crews' quarters to be caulked and made tight.
1	Dung and manure from cattle on board to be burnt.
3	Fish offal to be removed.
1	Flushing cistern to be repaired.
89	Food lockers to be cleansed, painted or limewashed.
8	Food scattered over bunks to be stowed in food lockers.
1	Fowl pen to be cleansed and limewashed.
11	Funnelling to be repaired or replaced by new.
5	Hatchways leading to crews' quarters to be repaired and made tight.
4	Hit and Miss ventilators to be repaired and made workable.
10	Holds to be cleansed after discharging cargoes.
2	Ladders leading to crews' quarters to be repaired.
4	Lamps in crews' quarters to be repaired and made workable.
6	Lids to water tanks to be renewed.
19	Louvres to be repaired and made workable.
27	Mattresses to be destroyed and replaced by new.
1	Pigs' pen to be cleansed and limewashed.
2	Pillows to be destroyed and replaced by new.
14	Refuse and rubbish to be removed from crews' quarters.
31	Rubber washers to be fitted to side lights.
12	Sails and spare gear to be removed from crews' quarters and stowed in bins fitted for the purpose.
2	Scuppers to be cleared to release water in bathroom.
1	Sheep's Pen to be thoroughly cleansed.
56	Side lights to be repaired and made tight.
1	Sink in bathroom to be thoroughly cleansed.
1	Skylight over crews' quarters to be repaired and made tight.
2	Steam pipes leading into crews' quarters to be repaired.
42	Store rooms to be cleansed, painted or limewashed.
4	Stores and part cargo to be removed from crews' quarters.
5	Stoves in crews' quarters to be repaired.
1	Straw for storing cargo to be retained on board and not landed.
3	Ventilators to be repaired or replaced by new.
31	Ventilators to be freed from packing and coverings.
27	Water barrels to be cleansed on the inside.
1	Water barrel to be replaced by an iron tank.
7	Water tanks to be cleansed on the inside with steam.
98	W.C.'s to be thoroughly cleansed, painted or limewashed.
1	W.C. pan to be replaced by new.
1	W.C. seat to be repaired.
26	Plague Precautions issued *re* rats and carried into effect.
847	

All vessels arriving from Plague, Cholera, Yellow Fever or Smallpox infected areas have been dealt with under the Plague Regulations, 1907, or the Port Sanitary Authorities (Infectious Diseases) Regulations, 1920.

The foregoing tables give a detailed list of the number and nature of the defects found on inspection, for which Informal Notices were served to remedy.

In most cases the Officers directed the cleansing or remedying of the defects to be taken in hand immediately. Should, however, time and circumstances prevent the immediate repairs or painting, etc., being carried out, permission has been given to do the work during the round voyage or at their terminal Port, when, in such a case, a duplicate notice of the defects are forwarded to the Medical Officer of Health of the Port of destination.

In dealing with structural defects, the Board of Trade Regulations as to the survey of masters' and crews' spaces are ever borne in mind during inspection, and any infringement would be notified to the officials of the Board of Trade.

SHOWING NATURE AND QUANTITY OF FOODS INSPECTED DURING THE YEAR.

DIVISION 2.—*Preserved Meat, etc.*

	Tons	cwts.	qrs.	lbs.
Bacon	5	1	1	23
Bellies	10	0	0	0
Cockles		—		
Dripping		7	2	28
Frozen Sheep and Lambs	3	0	0	0
Fats of sorts ..	10	14	3	6
do. Premier Jus.		6 Tierces		
Herrings, in brine ..		1	0	0
Hams, dry salted ..	19	12	0	0
Hams, Boraxed ..	3	18	1	4
Kippers		1	2	0
Pilchards		5	2	0
Pork, dry salted ..		5	0	0
Salted Codfish ..	7	9	2	0

DIVISION 3.—*Canned and Bottled Goods.*

Apple Juice	2 kdkns.
Blood Pudding	3 C/s
Beef and Tongue	1 C/s
Boiled Beef	3 C/s
Bovril	10 C/s
Brawn	1 C/s
Butter	2 C/s
Cordials, etc.	17 C/s
Corned Beef	170 C/s
Crab	5 C/s
Crayfish	4 C/s
Fruits	663 C/s
Fruit Pulp	174 C/s
Fruit Salad	19 C/s
Ginger	1 C/s
Herrings and Tomato ..	7 C/s
Jams	50 C/s
Lemco	1 C/s
Lobsters	4 C/s
Milk	71 C/s
Meat Balls	2 C/s
Meat Potted	7 C/s
Mutton	6 C/s
Oxo, Bottled	46 C/s
Pickles	10 casks.
Peas	2 C/s
Pigs Tongue	1 C/s
Pork and Beans	2 C/s
Prawns	1 C/s
Sardines	54 C/s
Salad Oil	1 C/s
Salmon	131 C/s
Sauce	5 C/s
Soups	10 C/s
Spinach	1 C/s
Tomatoes	8 C/s
Tomato-puric	3 C/s
Tongues, Ox	84 C/s
Vinegar, Bottled	2 C/s

DIVISION 4.— *Fresh Fruit, and Vegetables.*

	Tons	cwts.	qrs.	lbs.
Apples	17	15	3	13
Bananas		68 crates		
Cabbages	4	3	1	0
Carrots	39	2	0	0
Cauliflowers ..	15	12	1	0
Cucumbers ..		17	2	0
Cokernuts			1 bag.	
Grapes	3	10	2	12
Grape-fruit ..			12 C/s	
Gooseberries ..		14 sacks		
Lemons		128½ cases		
Lettuce		3 crates		
Melons			5 cases	
Onions	63	0	0	0
Oranges		90 cases		
Plums		12 cases.		
Pears	24	10	3	23
Pineapples			2 cases	
Pomegranates ..			10 cases	
Parsnips	27	12	0	0

Division 4.—*continued.*

	Tons	cwts.	qrs.	lbs.
Peas	3	12	1	14
Potatoes	299	15	3	0
Raspberries ..		1	2	5
Strawberries ..	11	9	1	17
Sloes				5 C/s
Turnips	3	0	0	0
Tomatoes	10	14	2	2

Preserved Vegetables and Fruit.

Vegetables in brine	11 brls.

Dried, etc.

Apple Rings	14 C/s
Almonds	21 C/s
Cherries Crystallised ..	30 C/s
Currants	179 C/s
Dried Plums	53 C/s
Dried Fruit	41 C/s
Dates	27 C/s
Figs	51 bags
Lemon Peel	6 C/s
Muscatels	5 C/s
Nuts of sorts	24 bags
Pears Dried	3 C/s
Raisins	36 C/s
Sultanas	122 C/s

DIVISION 5.— *Grain.*

	Tons	cwts.	qrs.	lbs.
Barley	16	5	0	0
Maize	304	10	0	0
Oats	18	15	0	0
Wheat		5	0	0

MISCELLANEOUS.

	Tons	cwts.	qrs.	lbs.
Biscuits				102 C/s
Beans				5 bags
Butter				10 C/s
Baking Powder ..				5 C/s
Barley, Pearl ..				12 bags
Chocolate				5 C/s
Cheeses				149 crates
Coffee Extract ..				225 C/s
Coffee				11 bags
Cocoa				9 C/s
Coffee Berries ..				4 bags
Cream of Tartar ..				1 keg
Caraway Seeds ..				2 bags
Chillies				1 C/s
Confectionery ..				94 C/s
Cocoanut				12 C/s
Cornflour				22 C/s
Eggs, yolk of ..				19 C/s
Flaked Corn ..				2 C/s
Flour	23	3	2	0
Ginger				14 C/s
Ginger Chips ..				1 C/s
Gripe Water ..				1 C/s
Groats				1 bag
Golden Syrup ..				47 C/s
Green Peas ..				23 bags
Honey				1 C/s
Lard				437 C/s
Lard Compound ..				11 C/s
Lentils				11 bags
Margarine				65 C/s
Macaroni				6 C/s
Nutmegs				2 kegs
Oatmeal				4 bags
Peas, Blue				5 sacks
Preserves				17 C/s
Porridge Oats ..				85 C/s
Pepper				8 kegs
Rice				78 bags
Rennet				2 C/s
Saffron				1 C/s
Suet				11 C/s
Spice, Ground ..				2 kegs
Salt				18 bags
Sugar	53	7	3	14
Tapioca				20 bags
Tea				58 Chests
Treacle				1 ck.

TABLE 43.

BATHING POOLS.

Purity of the water is estimated by bacteriological examination at various states of the tide. Samples taken from each place on ten occasions showed the following :—

Area from which Samples were obtained.	*No. of Samples in which B. Coli was present in*		
	0.1 cc.	*1 cc.*	*5 ccs. and over.*
(*a*) Crab and Lobster Fisheries—			
The Needles off Tinside	8	10	10
Outside Port Sanitary Office, Millbay Pier ..	8	10	10
Firestone Bay	9	10	10
S.E. Drake's Island ..	10	10	10
(*b*) Bathing Places—			
Ladies' Basin No. 1 ..	9	10	10
Ladies' Basin No. II ..	8	10	10
Tinside Bathing Beach	7	9	10
Ladies' Bathing Place off Promenade Pier ..	9	10	10
Men's Basin	9	10	10
Devonport Ladies' Basin	10	10	10
Devonport Men's Basin	7	8	10

TABLE 42.

SHOWING NATURE AND QUANTITY OF FOODS CONDEMNED DURING THE YEAR 1927.

		Tons	cwts.	qrs.	lbs.
DIVISION 2.					
Codfish				0	16
Fats of sorts		10	18	2	27
Hams		3	18	1	4
Lard		3	4	0	0
DIVISION 3.					
Apricots	22 cans			1	27
Blood Puddings	8 ,,				20
Boiled Mutton	2 ,,				8
Cherries	15 bottles			1	10
Coffee Extract	16 ,,				22
Corned Beef	57 cans		2	3	9
Crab	1 can				2
Crayfish	2 cans				2
Fruit Pulp	103 ,,		14	2	0
Gooseberries	4 bottles				8
Jams	7 jars				22
Loganberries	9 cans				19
Marmalade	2 jars				22
Meat Balls	1 can				2
Oxo	12 bottles				12
Peas	1 can				2
Peaches	40 cans			3	16
Pears	18 ,,			1	17
Pickles	2 bottles				8
Pineapples	108 cans		1	2	27
Pork and Beans	1 can				1
Salad Oil	1 bottle				
Salmon	26 cans				20
Sardines	14 ,,				7
Sauce	1 bottle				1
Tomatoes	1 can				2½
Tongues (Lunch)	5 cans				20
Vinegar	2 bottles				2
DIVISION 4.					
Almonds			2	0	0
Apples		2	17	0	24
Bananas			15	2	0
Cabbage		3	17	1	0
Carrots		10	9	1	0
Cauliflower		9	1	3	0
Cherries, Crystallised			3	0	0
Cucumbers			6	1	12
Currants, Dried			3	0	0
Figs			1	1	0
Gooseberries			10	0	0
Lemons			3	1	14
Lentils			3	2	0
Oats Rolled			4	0	0
Onions		6	7	3	0
Oranges		3	7	2	27
Parsnips		16	4	2	0
Peas, Dried (Blue)			7	1	0
Pearl Barley				1	1
Pears		11	9	0	21
Pineapples				2	5
Plums			1	0	0
Potatoes		54	9	0	6
Prunes			2	3	0
Raisins				1	8
Raspberries			1	2	5
Rice					14
Strawberries			5	1	14
Sultanas			10	2	14
Tomatoes		4	7	2	2
Turnips		2	0	0	0
DIVISION 5.					
Maize		180	0	0	0
MISCELLANEOUS.					
Confectionery			4	0	0
Cornflour				2	0
Flour		4	5	0	0
Lemon Peel					14
Oats (Quaker)				2	4
Pepper			2	0	18
Salt			1	0	0
Sugar			5	1	11
	Total	332	15	3	18

MEDICAL INSPECTION OF ALIENS. PORT SANITARY DISTRICT OF PLYMOUTH.

YEAR ENDED DECEMBER 31st, 1927.

Total number of Aliens arriving at the Port, including those in transit and transmigrants but *excluding Alien Seamen.*		No. of temporary visitors, *i.e.* Aliens whose stay in this Country will not exceed three months.			No. of Aliens who intend to settle permanently or remain in this Country for more than three months.		
Total Number.	No. subjected to medical inspection.	Total Number.	No. subjected to medical Examination.	No. of Certificates issued.	Total Number.	No. subjected to medical Examination.	No. of Certificates issued.
15,222	14,772	13,485	4	1	621	428	4
					Residents returning	......	193

ALIENS IN TRANSIT.		
Total number.	No. subjected to Medical Examination.	No. of Certificates issued.
664	1	nil.

TRANSMIGRANTS.	
Total Number.	No. subjected to Medical Examination.
452	17
Certificates	Issued .. 2

The term " inspection " relates to the preliminary inspection of aliens as they pass before the Medical Inspector.
The term " Medical Examination " relates to detailed medical examination.

PARTICULARS RELATING TO DETAILED MEDICAL EXAMINATION OF ALIENS.

Aliens, who were subjected to detailed medical examination, and were not Certified by Medical Inspector	443
Number of each of the following certificates issued by the Medical Inspector of Aliens :—	
(*a*) Certificate that an alien is a lunatic, idiot or mentally deficient	2
(*b*) Certificate that, for medical reasons, it is undesirable that an alien should be permitted to land	nil.
(*c*) Certificate that an alien is suffering from some disease, defects or deformity which may interfere with his capacity to support himself or his dependents	3
(*d*) Certificate that an alien is suffering from one of the acute infectious diseases	nil.
(*e*) Certificate that for the purposes of an adequate medical examination it is necessary for the alien to land in order that he may be examined ashore	nil.

TRANSMIGRANTS.

Number of certificates of the cleansing of verminous transmigrants given by the Medical Inspector of Aliens to the Immigration Officer	nil.
Number of medical certificates in respect of transmigrants suffering from trachoma, favus, etc., given to the Immigration Officer	2

PARTICULARS RELATING TO ALIEN TRAFFIC.

Total number of passenger vessels carrying aliens which arrived during the year	658
Number of passenger vessels dealt with by Medical Inspector of Aliens	657
Total number of cargo vessels carrying alien passengers which arrived during the year	37
Number of cargo vessels dealt with by Medical Inspector of Aliens	37
Any other vessels in connection with which the Medical Inspector has had to take action in regard to aliens	nil.

TABLE 45.

CHIEF PORTS (BRITISH AND FOREIGN) WITH WHICH PLYMOUTH HAS TRADE.

IMPORTS FROM FOREIGN.

Antwerp	Beans, Carrots, Onions, Parsnips, Pears, Potatoes, Red Cabbage, Vegetables in brine, Confectionery, Lard and Sugar.
Amsterdam and Rotterdam	Onions, Potatoes, Flour, Lard, Sugar, Mineral Waters, Wine, Butter, Artificial Flowers, Enamelware, Candles, Carpets, Cotton Goods, Cocoanut Matting, Cable, Electric Batteries, Geneva, Glassware, Granite, Hardware, Kanite, Lithophone, Machinery, Matches, Musical Instruments, Shrubs, Tiles, Toys, Woodware, Plants, etc.
Basrah and Karachi	Grain.
Baltimore and Philadelphia	Grain and Oil.
Brest, Ghent, La Paix, Paimpol, Perros, Plougastel, Roscoff, St. Malo, Treguier, Lazardrieux and Pt. Blanc	Carrots, Cauliflowers, Green Peas, Onions, Parsnips, Potatoes, Strawberries, Pears, Peaches, Plums, Brandy and Cider.
Norway and Sweden	Glassware, Horse Shoes, Ironware, Matches, Lead Pipes and Sheeting, Starch, Timber, Wood Goods, etc.
Hamburg	Carrots, Onions, Potatoes, Cheese, Lard, Cream of Tartar, Fruit Pulp, Glass (bottles), Paper, Hardware, Carpets, Candles, Cotton Goods, Blankets, Enamel ware, Electrical Appliances, Metalware, Musical Instruments, Wood Goods, Sugar, etc.
Iquique	Nitrate.
Buenos Ayres, Tampico, River Plate, Rosario, La Plata, Bahia Blanca	Grain.
Melbourne and Sydney	Grain.
Montreal, Quebec and Vancouver	Grain.
Odessa, Novorossisk, Taganrog and Black Sea Ports	Grain.
St. John's, Newfoundland	Codfish.

IMPORTS COASTWISE.

Aberdeen, Dundee and Kirkcaldy	Potatoes and Oatmeal.
Bristol	Fruit, Vegetables, Cattle Foods, Glucose, Oils, Paints, etc.
Belfast	Fruits, Potatoes, Vegetables, Bacon, Cotton and Wool Goods, Government Stores, Linoleum, etc.
Blyth, Newcastle and Sunderland	Coal.
Cardiff and Swansea	Coal and Flour.
Channel Islands	Fruit, Vegetables, Fats of sorts, Bones, and Rags.
Glasgow, London, Liverpool and Southampton	Dried Preserved and Fresh Fruits, Canned Goods, Vegetables, Flour, Sugar, Cotton Goods, Linoleum, Metal Castings, Woollen Goods, etc.
Hull and Leith	Confectionery, Salt Fish and Vegetables.
Waterford	Bacon, Eggs, Margarine, Oats, etc.

EXPORTS.

Fish is sent to Spain and Italy in barrels; trawlers also take large cargoes to Germany.

Pitch is sent to France.

China Clay is sent to Germany and America.

Scrap Gun Metal, Tallow, Skins, Wool Tops and Bone Meal are sent to Germany.

TABLE 46.

CASES OF INFECTIOUS SICKNESS DEALT WITH DURING THE YEAR 1927.

Disease.	*Number of Cases Investigated.*			*Totals.*
	Disposed of during voyage	*Landed at Plymouth.*	*Proceeded in Ship.*	
Smallpox	7	—	—	7
Scarlet Fever . .	—	—	4	4
Diphtheria	—	—	1	1
Typhoid Fever . .	10	1	6	17
Pneumonia	9	1	8	18
Cholera . .	1	—	—	1
Acute Poliomyelitis	—	1	—	1
Dysentery	7	1	4	12
Erysipelas	—	—	3	3
Respiratory Tuberculosis	13	7	20	40
Malaria (contracted abroad) . .	74	3	64	141
Chicken-pox . .	1	1	6	8
Measles	10	2	8	20
Whooping Cough . .	1	—	6	7
Paratyphoid . .	(1)	—	(2)	(3)
Blackwater Fever . .	—	—	1	1
Dengue Fever . .	—	—	3	3
Influenza	11	3	7	21
Mumps	3	1	6	10
Venereal Disease . .	15	5	29	49
Yellow Fever . .	1	—	—	1
TOTALS (excluding 3 paratyphoids)	163	26	176	365

TABLE 47.

PARTICULARS RELATING TO VESSELS "INFECTED" OR "SUSPECTED" OR FROM INFECTED PORTS ARRIVING IN THE PORT DURING 1927.

Name of Vessel. 1.	Date of Arrival. 2.	Whether infected, suspected or from an infected Port ? 3.	Methods of Rat Destruction Employed.			Number of Rats killed. 7.	Whether a Certificate of Deratization was issued ? 8.	Remarks. 9.
			Fumigation by Sulphur Dioxide. 4.	Fumigation by Hydrocyanic Acid 5.	Trapping, poisoning, etc. (including dogs, cats and mongooze). 6.			
Panaghi Vagliano . .	25 Aug.	Infected Port	—	—	Yes	75	No	—
Maid of Patras . .	28 Aug.	Infected Port	—	—	Yes	48	No	—
Westborough	16 Sept.	Infected Port	—	—	Yes	11	No	—

VESSELS (OTHER THAN THOSE INCLUDED ABOVE) SUBJECTED TO MEASURES OF RAT DESTRUCTION DURING 1927.

No. of Vessels fumigated by S.O.2. 1.	No. of Rats killed. 2.	No. of Vessels fumigated by H.C.N. 3.	No. of Rats killed. 4.	No. of Vessels on which trapping, poisoning, etc. were employed. 5.	No. of Rats killed. 6.	No. of Fumigation Certificates issued. Form "Port 10" 7.	No. of other certificates issued. 8.	Remarks. 9.
nil	nil	nil	nil	4	42	nil	nil	—

TABLE 48.

PASSENGER TRAFFIC DURING THE YEAR 1927.

No. of Passengers.	*1st Class.*	*2nd Class.*	*3rd Class.*	*Cabin.*	*Transmigrants.*	*Class unobtainable.*	*Total.*
INWARDS.							
Passengers from mailboats . .	9,847	3,339	6,739	6,156	(452) Included in other columns	10,024	36,105
Passengers from Cargo Vessels from North of France, etc.	—	—	210	—	—	—	210
	9,847	3,339	6,949	6,156	(452)	10,024	36,315
OUTWARDS.							
Passengers from mailboats . .	2,052	643	517	—	—	—	3,212

The principal countries from which passengers arrive are America, Africa, India, Canada and Australia.